



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
Mitchell Bros. Company.  
(INCORPORATED.)

Vol. IV.

CHICAGO, ILLINOIS, JULY 15, 1885.

No. 1.

SUBSCRIPTION PRICE,  
ONE DOLLAR PER ANNUM.

**CHANDLER-BROWN CO.,**

—Established 1863.—

**COMMISSION MERCHANTS,**

CHICAGO: Board of Trade.

MILWAUKEE: Chamber of Commerce.

YOUR FAVORS SOLICITED.

**HENRY RAEDER,**  
**ENGINEER AND ARCHITECT.**

912 Insurance Exchange Building,

WORKING PLANS, SPECIFICATIONS AND ESTIMATES.

**ELEVATORS BUILT COMPLETE,**

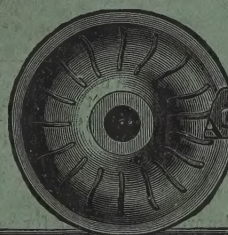
With all Machinery.

PRICES QUOTED on Application, Accompanied by DESCRIPTION of ELEVATOR Wanted.

**SLATE ROOFING**

Slate Roofing or Siding put on Elevators, or material furnished at Manufacturers' prices at any railroad point in the country. Write for prices.

AULD & CONGER, 100 Euclid Ave., Cleveland, Ohio.



**IMP. CHICAGO CAR MOVER!**

Provided with the Wedge-Shaped Riser.

ALLOWS NO SLIP to our machine, which makes a great IMPROVEMENT. It is now manufactured of Steel or Malleable Iron. Will not break. Light and handy. Cheapest and BEST in the market. To accommodate my numerous customers and save cost of freight, I constantly keep stock subject to order at Chicago, St. Louis, Kansas City, Minneapolis, Nashville and Buffalo, delivered free. If desired, 30 days' trial allowed. Send for references and prices. Address

CHAS. T. BARNES, 335 West Monroe St., CHICAGO, ILL.

**GARRY IRON ROOFING CO.,**

The Largest Manufacturers of Iron Roofing in the World.

Manufacturers of  
ALL KINDS OF  
**IRON ROOFING**  
AND  
**CRIMPED SIDING,**  
Fire-Proof Doors and  
Shutters.



**IRON ORE PAINT**  
And Cement.

152 Merwin Street,  
**CLEVELAND, OHIO.**

Send for circulars and  
Price List No. 79.

**O SAY!—WE DON'T WANT YOUR ORDERS**  
**FOR**  
**Elevator Engines and Supplies**

—To Go by Us,—

**BECAUSE** We can SUPPLY YOU with ANYTHING, from a HORSE POWER or an ENGINE, to a BOLT OR BUCKET.

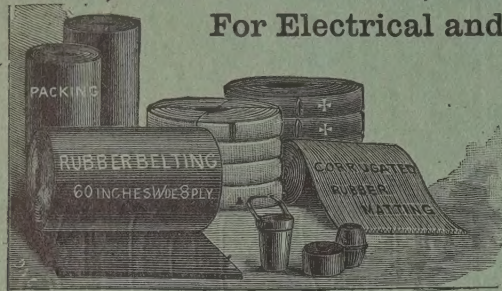
Place your Order for Entire Outfits WITH US, and avoid the trouble that always arises in buying of several different firms. Send for our NEW CATALOGUE and JUNE DISCOUNT SHEET.

Address **THE FROST MFG. CO., Galesburg, Ill.**

Or **A. B. COLTON**, Sales Agent Kansas and Nebraska, Care of Commercial Hotel, Lincoln, Neb.



# RUBBER BELTING, PACKING, HOSE, TUBING, Etc., HARD, RUBBER SHEET, ROD AND TUBE,

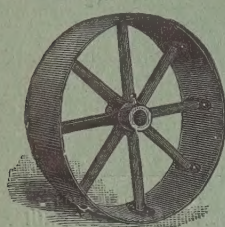


For Electrical and Other Uses.

Leather Belting,  
Lace Leather, etc.

Send for Illustrated Catalogue.

The Gutta Percha  
and Rubber Mfg. Co.,  
159 and 161 Lake St.,  
CHICAGO.



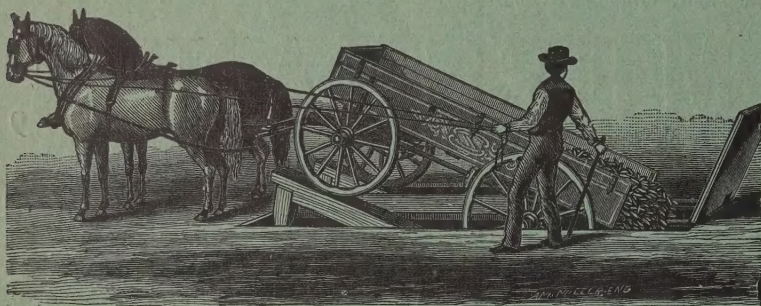
## THE MEDART PATENT WROUGHT RIM PULLEY. THE LIGHTEST, STRONGEST, BEST BALANCED AND CHEAPEST IN THE WORLD.

Whole pulleys from 9 inches to 120 inches diameter. Split pulleys from 12 inches to 120 inches diameter. All widths of face up to 36 inches, crowning or straight, with single, double or triple sets of arms. Also tight and loose pulleys. Absolute Satisfaction Guaranteed. SHAFTING, HANGERS, COUPLINGS, ETC.

### MEDART PATENT PULLEY CO.;

1206 TO 1214 N. MAIN ST., ST. LOUIS, MO.

STORES: 99 & 101 W. Second St., Cincinnati. 24 & 26 S. Canal St., Chicago



The above cut is a fair representation of the Rail Dump in common use, on which we are collecting a royalty for past use, and licensing parties to continue to use, and also put in new Dumps. Our patents on Rail Dumps fully cover this class of Dumps. Any one using Rail Dumps can readily decide by comparing his Dump with this cut, whether he infringes or not. We also control patents that cover Platform Dumps. Our prices are reasonable in settlements for past infringements, and for licenses to continue to use the Dumps.

Applications for Licenses for using said patented improvements, and for settlements for past infringements should be addressed to

J. M. HARPER, Room 28, Board of Trade Building, PEORIA, ILL.

## The Cincinnati Corrugating Co.,

CINCINNATI, OHIO.

## SUPERIOR IRON ROOFING!

Siding, Ceiling, Arches, Lath.

Most Economical, Durable and Effective. —SEND FOR OUR— Illustrated Catalogue.



## SHAFTING, PULLEYS, HANGERS.

F. Brown's Patent Friction Clutch.

Send for Illustrated Catalogue and Discounts to

A. & F. BROWN, 43 PARK PLACE, N.Y.

## R. JAMES ABERNATHEY, —GENERAL AGENT— BARNARD & LEAS MFG. CO.;

No. 523 Delaware Street, - - KANSAS CITY, MO.

Complete Plans and Specifications Furnished for Elevators without extra Charge. Victor Corn Shellers, Dustless Corn Cleaners; Barnard's Improved Warehouse Separators, and all other kinds of Elevator Machinery and Supplies Furnished at Shortest Notice.

READ THE FOLLOWING:

OFFICE OF G. B. SHAW & Co.,

CHERRYVALE, KAN., March 9, 1885.

DEAR SIR:—In answer to your recent favor will say, that with the three elevators we are now operating, built in accordance with plans furnished by you, we are well pleased, and would have no hesitation in recommending you as a skilled and economical designer of Elevators. With the machines and machinery bought of Barnard & Leas Mfg. Co. we are also well pleased, as it is all first-class and satisfactory in every way.

Very truly yours, G. B. SHAW & Co.

A. C. SHERMAN, Grain Dealer,

ROSSVILLE, KAN., March 5, 1885.

DEAR SIR:—I desire to say, that by following plans in building my Elevator at St. Marys, Kan., furnished me by you, and placing my order for machinery with Barnard & Leas Mfg. Co., of Moline, Ill., for Wheat Cleaner, Corn Sheller, and Cleaner and Elevator Goods entire, I now have one of the best Elevators in the state. Everything works splendid and to my entire satisfaction.

Respectfully, A. C. SHERMAN.

OFFICE OF TUDOR, ELLIOTT & Co., Grain and Chop-

ped Feed, HOLTON, KAN., March 31, 1885.

DEAR SIR:—We like the plan of our Elevator very much, and do not think that for a building of the size of ours the plans could be improved upon. Everything is simple and handy, and very easily run. The machinery works fine, and has ever since we started, and the Sheller is the best we have ever seen. The Corn and Wheat Cleaners could not do any better work than they do. We are fully satisfied and pleased with everything, and

should we conclude to erect another Elevator at some other point, will consult you for a plan.

Yours very truly, TUDOR, ELLIOTT & Co.

B. F. BLAKER & Co., Lumber, Building Material, Grain and Flax Seed,

PLEASANTON, KAN., March 5, 1885.

DEAR SIR:—The Elevators you designed for us at Fontana, Kan., and Sprague, Mo., are giving entire satisfaction, and the machinery all does its work well. We consider your plan very convenient, substantial and economical.

Yours very truly, B. F. BLAKER & Co.

BRINSON, HILL & Co., Grain Commission Merchants, OTTAWA, KAN., April 2, 1885.

DEAR SIR:—Replying to your favor of recent date, we take pleasure in saying, our new elevator built here last season, on your plans and specifications, gives us highest possible satisfaction; and the machinery furnished by Barnard & Leas Mfg. Co. is first-class in every respect, and works to our entire satisfaction. We have, up to this date handled about 150,000 bushels of ear corn, and a large amount of other grain through our elevator, and with your complete outfit of machinery, etc., and have not been to a nickel's expense or had one minute's delay from any cause whatever, all of which we credit to your well-arranged plans, and good class of machinery furnished by your house.

We can fully recommend and indorse your architecture and machinery, and you have liberty to refer to us, any time, any one contemplating building an elevator.

Very truly yours, BRINSON, HILL & Co.

## The "Duc" (STEEL) Elevator Bucket.



The Best Elevator Bucket Made.

Only two pieces. No corners to catch. Only one seam. Struck out from best charcoal iron, and hand riveted.



13 SIZES.

From 3 1/4 to 16 inches, in two weights, "light" and "heavy;" the former for use in Flour, Drug and Spice Mills, and light work generally, and the latter for use in Mines, Factories, and heavy work.



Prices Reduced  
JAN. 1, 1884.

This bucket has been before the trade for ten years, and has met with the unqualified approbation of the public.

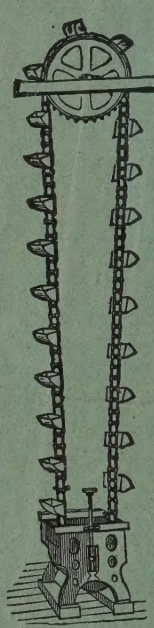


OVER  
1,500,000  
SOLD.

For circulars address

IRON CLAD MAN'G CO.,  
Sole Manufacturers,  
22 Cliff St., New York.

## Roller Chain Belting



DETACHABLE

In every Link. Especially Designed for

Elevators,  
Conveyors,  
Drive Belts,  
Etc., Etc.

—FOR HANDLING—

Grains, Seeds,  
Ear Corn, Malt,  
Cotton Seed, Coal,  
Stone, Clay,  
Paper Pulp,  
Tan Bark,  
Boxes,  
Barrels, Etc.

Before placing Orders send for Circular and Price List. Address

ROLLER  
Chain Belting  
COMPANY,  
Columbus, Ohio.

## STEEL CALDWELL'S CONVEYOR

Standard Diameter, 4-inch, 6-inch, 9-inch, 12-inch and 16-inch, right and left hand of

## STEEL CONVEYOR

Carried in Stock. Prompt Shipments. A record of nine years' continuous use. The Caldwell Conveyor Coupling is the only one that admits of disconnecting and taking out one length of Conveyor without moving back the whole line.

## SCAIFES' SEAMLESS STEEL Elevator Buckets.

"THE CLIMAX," made of one piece of STEEL, without seam or rivet, and with the best shape. Sizes in stock ready for shipment—5x4 in., 6x4 in., 7x4 in., 8x5 in., and 9x5 in. Send for new 1885 Catalogue.

H. W. CALDWELL - 40 S. Canal St., Chicago.  
DEALER IN ELEVATOR SUPPLIES.

Look no further! Send for Pocket Wallet containing Circular and Price List No. 13

Suitable for ALL classes of buildings, easily put on. Unsurpassed. Use the Sykes' Improved and be happy.





A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
Mitchell Bros. Company.  
(INCORPORATED.)

Vol. IV.

CHICAGO, ILLINOIS, JULY 15, 1885.

No. 1.

SUBSCRIPTION PRICE,  
ONE DOLLAR PER ANNUM

## THE BURLINGTON AND MISSISSIPPI GRAIN ELEVATOR, BURLINGTON, IOWA.

We present to the readers of the *AMERICAN ELEVATOR AND GRAIN TRADE* an illustration of the Burlington and Mississippi Grain Elevator, situated at Burlington, Iowa, adjoining the yards of the C. B. & Q. Railroad.

The elevator lies broadside the Mississippi, so that grain can be loaded and unloaded with equal facility by rail and water. Car tracks run through the house on both sides, thus enabling 10,000 bushels to be handled per hour.

The newest and most approved appliances for transferring, cleaning, and shelling grain are in use in this establishment, which is as complete in every detail as modern mechanical skill can make it.

The storage capacity is 800,000 bushels, there being twelve elevators, six on each side, to each of which is attached a Coker Patent Power Grain Shovel, with the Metcalf Patent Automatic Attachment. It will be seen that by these arrangements 250 cars can be handled within ten hours.

Protection against fire is as complete as ingenuity can devise. Pipes are run through the house, and through these water is supplied by machinery in the elevator.

The stock of the Burlington and Mississippi Elevator Company is held by men of financial responsibility, and excellent business reputation, William H. Morgan, Esq., of New York, being President, and T. W. Barhydt, Esq., of Burlington, the President of the Merchants' National Bank, being treasurer of the company.

The Elevator Company has no connection with any grain firm, nor does the company buy or sell. Therefore the grain dealers of Western Iowa, Kansas, Nebraska, and elsewhere can feel sure that the elevator company is in no sense a competitor in the grain trade. The house is emphatically a public storehouse.

It is believed that the company has fixed rates lower than any other elevator in the West, and we are informed that the elevator receipts can be used through one or more banks at Burlington on satisfactory margins.

Mr. H. C. Dayton, manager, will furnish information as to rates, or any particulars which may be desired, by addressing him at Burlington.

An enterprise upon which so much money has been

spent, and which would seem to be entitled to public confidence, should certainly succeed, not only for itself, but for the city where it is located, and to the benefit of the great grain section surrounding it.

## BUFFALO AND HER ELEVATORS.

In the foreground stands the most imposing row of bread-distributors on the lakes, the mammoth grain ele-

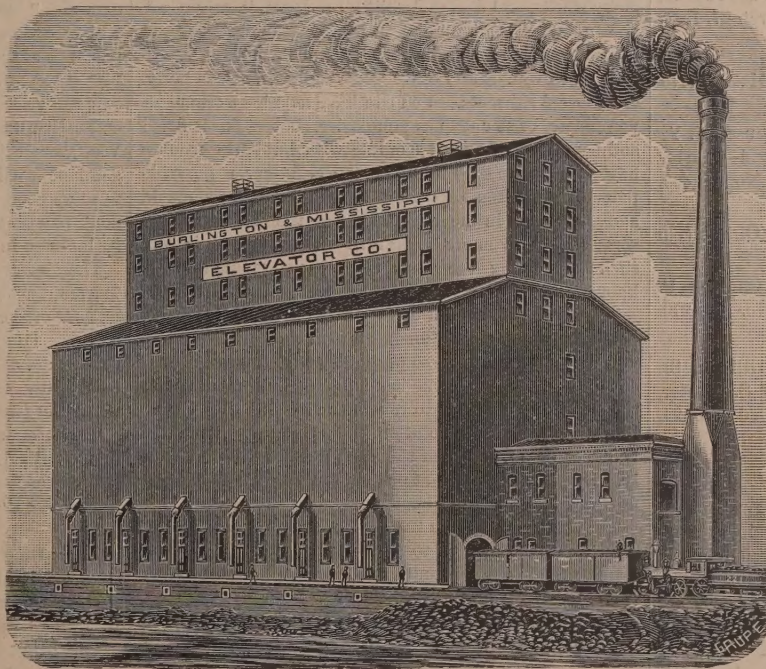
here, in 1842, that a Buffalonian, Joseph Dart, built the first steam storage transfer elevator, on the well-known elevator and conveyor principle of Oliver Evans, in the face of the jeers of his townsmen, who predicted that he would find to his cost that "Irishmen's backs were, after all, the cheapest elevators."

The capacity of Joseph Dart's elevator was but 55,000 bushels, with a power of raising 1,000 bushels an hour. To-day such an elevator as that of the connecting

terminal railroad, having a capacity of 1,000,000 bushels, can elevate 19,000 bushels an hour. Watching the legs of the two towers of this huge elevator drop upon a mass of wheat in the hold of a lake vessel moored at its wharf, the machinery start, and the twelve-quart buckets dip down into the grain and rush with lightning speed up into the roof of the building, where they deposit their load in the bins, it is not difficult to believe that a cargo which, by the old method of "Irishmen's backs," would have required a month to discharge, can now be stowed away in five hours.

Buffalo Creek is interesting, not only for its connection with an invention which, by facilitating the movement of breadstuffs, has a vital concern for all mankind, but as the stream—"a ford then only waist deep"—from across whose entrance some sixty years ago a few citizens, determined that Buffalo should be the western terminus of the Erie Canal, dug away the sand-bar which choked its channel. Buffalo Creek Harbor was begun, carried on, and completed principally by three private individuals, who mortgaged the whole of their estate in its behalf. The river is now protected north and south by two breakwaters, but

the capacious harbor thus obtained is sufficient for the growing commerce of the city, and the United States government is making an outside harbor by the construction of a breakwater designed to be four thousand feet long, fronting the entrance of the river about a half-mile from the shore. With the completion of this breakwater facilities will exist for the building of new wharves aggregating an additional five miles, making the available water-front about nineteen miles. In other words, the commerce of Buffalo Creek is destined one day to rival the gigantic traffic of the river Mersey, when the harbor of this queen city of the lakes will vie with that of Liverpool in her endless docks and warehouses.—*Harper's Magazine*



THE BURLINGTON AND MISSISSIPPI GRAIN ELEVATOR, BURLINGTON, IOWA.

vators of Buffalo Creek, nearly forty of them, making an elephantine procession a mile long, with a combined storage capacity of 9,250,000 bushels, and a transfer capacity of 3,102,000 bushels, or, in other words, the power of receiving from lake vessels and transferring to canal boats and cars daily 3,000,000 bushels of wheat, a rate unequalled at any other port in this country. It is not uncommon to see a large lake vessel unloading and two canal boats and two trains of freight cars loading at the same time.

The site of the Bennett Elevator, at the junction of the creek and the Evans ship canal, is historic as marking the scene of an experiment only less interesting than the first voyage of Robert Fulton's steamboat, for it was



## LATE PATENTS.

Issued on June 16, 1885.

**CAR STARTER.**—Mark Potter, Syracuse, N. Y. (No model.) No. 320,088. Filed March 9, 1885.

**GRAIN CLEANER.**—Lucius O. Stevens and Lellie E. Stevens, Burlington, Iowa. (No model.) No. 320,013. Filed August 21, 1884.

**MACHINE FOR SACKING, WEIGHING AND REGISTERING GRAIN.**—George H. Caughrean, Pleasant Hill, Mo. (No model.) No. 320,218. Filed Nov. 28, 1884.

**GRAIN SEPARATOR.**—Edward Huber, Marion, Ohio. (No model.) No. 320,356. Filed March 25, 1885.

**GRAIN SHOVELING MECHANISM.**—John S. Metcalf, Burlington, Iowa. (No model.) No. 319,988. Filed February 25, 1885.

**GRAIN WEIGHING AND TALLYING MACHINE.**—Israel H. Murdick, Hartford, Mich. (No model.) No. 320,383. Filed June 14, 1884.

Issued on June 23, 1885.

**DRIER.**—William J. Possons, Cleveland, Ohio. (No model.) No. 320,498. Filed Feb. 26, 1884.

**ELEVATOR.**—William M. Babbatt and John H. Roberts, Pittsburg, Pa. (No model.) No. 320,745. Filed Oct. 1, 1884.

**ELEVATOR BUCKET.**—William H. Clark and William J. Clark, Salem, Ohio. (No model.) No. 320,760. Filed April 15, 1885.

**FEEDING MECHANISM FOR MILLS, ETC.**—Peter Fuchs, Davenport, Iowa. (No model.) No. 320,867. Filed April 6, 1885.

**MACHINE FOR MEASURING AND ELEVATING GRAIN.**—Samuel R. Daxon, Perryton, Ill. (No model.) No. 320,465. Filed March 12, 1885.

**FLAXSEED SEPARATOR.**—George Adams, Sherburne, Minn. (No model.) No. 320,831. Filed March 27, 1885.

Issued on June 30, 1885.

**CAR STARTER.**—John King, Medway, Mass. (No model.) No. 321,225. Filed May 15, 1885.

**CAR STARTER.**—Jacob Van Zandt, Syracuse, N. Y. assignor of two-thirds to Alvin J. Belden and Charles Roblee, both of same place. (No model.) No. 321,405. Filed Oct. 27, 1884.

**DRIVE CHAIN.**—Edward Huber, Marion, Ohio. (No model.) No. 321,361. Filed April 24, 1885.

**FANNING MILL.**—Thomas M. Bales and Charles P. Riley, Connersville, Ind. (No model.) No. 321,270. Filed Nov. 20, 1884.

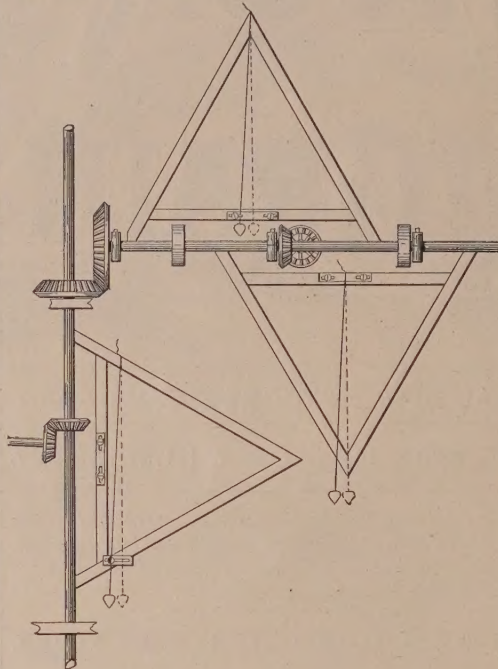
**AUTOMATIC GRAIN SCALE.**—John F. Milligan, St. Louis, Mo., assignor of one-half to George S. Foster, same place. (No model.) No. 321,129. Filed Feb. 24, 1885.

Says the *Pioneer-Press*: "The grain dealers of St. Paul are disposed to carp at the new system of grain grading and inspection, and their disposition is reflected in the attitude of many elevator proprietors in Minneapolis, Duluth, and throughout the state. The complaints are not very specific. In general the system is denounced as complicated, expensive, and likely to be ineffective; and the prediction is made that the farmers who have demanded it will be disappointed and clamor for its abandonment. It is well not to take too much stock in pessimistic talk of this sort in advance of an actual test of the new system. Doubtless defects will be discovered, and actual experience will point out a way to get rid of cumbersome and useless machinery. But the essential features of the system are good in theory, and if they do not work well in practice the fault will be in the execution of the law. Uniform grading and fair state inspection have been pointed out by the experience of other states as the necessary basis of a just and honest grain market. The present system honestly tries to accomplish these ends. If it doesn't, it must be amended until it does. But it is not fair to assume in advance that the law is going to fail. It ought to have a fair trial."

## NOVEL DEVICE FOR PLUMBING AND LEVELING.

The device here illustrated is not original with me, except as applied to shafting and other work connected with a mill. It is very simple, and its accuracy can be proven beyond a doubt, as the principle on which it is based is the plumb bob. Though it may not be mechanical enough for a millwright, yet by its frequent use many shafts out of plumb and out of level can be detected and righted at once.

Make an A-shaped frame of sufficient size to get a good range for the plumb bob, after which its exact size



is immaterial. By going over your mill and measuring the diameters of some small pulleys and gear wheels on many shafts, and also their distances apart, it might aid you in determining the height to make the cross-bar and the width apart for the lower ends, thus enabling you to span more wheels and other obstructions, such as hangers, journal caps, etc. You can have as nice a frame as you please, or as cheap as you desire, but make it firm; and if you wish to get it accurate with but little trouble have attached to the middle of the cross-bar a movable piece of sheet iron, on which have a fine center mark, and also a nick in the lower side for the string to pass through when you are using it in an inverted position, such as leveling the shaft from the bottom side. A knot can be tied on the string to prevent pulling through.

The sheet iron should be fastened on with two screws passing through slots, allowing it to move endwise. Then you will not have to be so particular with the lower ends of the frame, and can true it up quickly by placing on the shaft, and continue to reverse ends until the plumb line strikes the same point on the cross-bar. Thus the frame can be trued, and the shaft leveled simultaneously. By placing a mark at one side of the center mark a uniform incline can be shown.

The sketch will make the device and its use plain. The important points to be observed are: Make your frame firm, use fine plumb line, heavy plumb bob, and occasionally reverse ends to test its accuracy. The necessity of having shafts, etc., properly lined up is, of course, apparent to all.—D. S. Greeley in *American Miller*.

Frank Drake's term of office as Chief State Grain Inspector at Chicago will expire soon. When asked by the *Tribune* correspondent as to the probability of his reappointment, the Governor said: "I cannot say what I shall do in that matter. I shall not take up that business for decision until after I visit Chicago. I want to go up and talk with the folks there, and see what they want, and that will not be until after I have disposed of the Pleuro-Pneumonia Commission and the Soldiers' Home Commission. I think I shall go to Chicago to look after that matter between the 12th and 17th of this month." He declined to indicate what his probable action will be, but said that Frank Drake, P. Bird Price, N. W. Brainard, J. T. Rawleigh, and Mr. Rood, of Chicago, Maj. Town, of Pecatonica, and others, are strongly recommended for appointment to the place.

## IN THE SOUTHWEST.

[Special Correspondence AMERICAN ELEVATOR AND GRAIN TRADE.]

KANSAS CITY, Mo., July 13, 1885.—The amount of wheat on hand in city elevators at present is 711,788 bushels, being an increase over that on hand last month of 59,943 bushels. This increase was rather unlooked for four weeks ago. It is a curious fact that the great bulk of wheat now coming to market is sent from those points where a great scarcity was complained of. This seems to prove that there is very little credence to be given the reports sent out by state statisticians. Yet dealers in grain seem to give the most implicit confidence to such information, and bear or bull the market as the signs of failure or plenty are displayed. Naturally such statistics are of importance to a certain extent; but the history of successful grain speculators seems to prove that those who have best used individual efforts toward settling the question of probable supply have in the end been the most fortunate in their ventures. These state and government reports are good so far as showing a general condition of affairs as regards crops. Reports on crops are to speculators what the mercantile agencies are to merchants—they serve to give pointers. No merchant will trust firms simply because an agency reports them good. Some of the best customers are frequently rated very low. No speculator can prove his wisdom who, because public officials report a certain shortage of crops, at once puts on the bull's tactics. Here we have had during the past three months reports from Washington varying very widely, so that if one attempts to control his movements by them it will be nothing but a sea-saw game in which the confiding one will eventually be landed on his back.

The wise man has his own army of correspondents constantly supplying him with information which will pour the ducats into his pocket. I am acquainted with several grain firms in this city who take no trade papers. These gentlemen send out a circular each day to their various customers, which is gotten up by local establishments, and not one of these circulars gives a single item with reference to the state of crops. These thoughtless men say that it costs them amply to be obliged to use these circulars, and that they are compelled to "cut down expenses," and cannot take any strictly trade paper, which makes a specialty of giving news of vital importance to their success. Now it is not purposed to hint at the advisability of these men taking the AMERICAN ELEVATOR AND GRAIN TRADE (although those who do receive it monthly say it is the best trade paper in the West), but I do hope these "penny wise, pound foolish" gentlemen will not rest easy until they have subscribed to some good journal devoted to their interests, and if it don't pay them a hundred-fold, I am one of the worst fooled men in existence.

The elevators in the city report in store (aside from 711,788 bushels of wheat mentioned above), 184,501 bushels of corn, 4,112 bushels of oats and 7,322 bushels of rye. There are 56,654 more bushels of corn on hand than at the corresponding time last month, and oats are beautifully on the decrease, being 10,858 bushels less, while the supply of rye is about doubled.

The total amount of wheat handled here during 1885 to date is 2,254,898 bushels, against 1,030,697 bushels for the corresponding time during 1884, being 1,224,201 bushels to the credit of 1885 over 1884—a pretty good showing—and it is wise to make the most of the display while we may, as next year wheat figures will make us sick. In fact, we are sick on corn statistics. Last year to date we had handled 5,014,210 bushels, while this year only 2,089,417 bushels have been put into our elevators, being 2,924,793 bushels less. There is one comfort, however, we have got a better bargain for our corn than we did a year ago.

During the past month the tendency of prices on all cereals has been downward. On June 10 the highest price of the year for No. 2 Red was reached, 83¼ cents. Since that date prices went steadily downward until on July 6 they reached 71¼ cents. After this a reaction set in, until to-day the same sold at 75 cents, 8¼ cents lower than at the opening of the month. The highest point reached by No. 2 soft winter was on June 12, 96 cents. The last day of June prices reached the bottom, being 83 cents, 13 cents lower. To-day the same grade was selling at 85½ cents, 10½ cents lower than the top price of the month. This is 15½ cents lower than the highest price so far this year. From 75½ cents at the opening of the month under review prices went down 12 cents by the 6th inst. to 63½ cents. Prices to-



day were quoted at 65½ cents. The extreme variations of the three above grades for the month have been as follows: No. 2 red winter, 12 cents; No. 2 soft winter, 15 cents, and No. 3 red winter, 12.3-8 cents.

Corn has followed in the same channel as regard to prices as wheat. The highest price of No. 2 cash was on June 10, 38½ cents; from that date prices went down until June 26 34¼ cents was paid, 3¼ cents lower; and to-day 37½ cents was paid. No. 2 white went down from 46½ cents, on June 10, to 40½ cents on June 25, 6 cents decline, and to-day prices are quoted at 43 1-8 cents. The highest price during the present year for No. 2 cash corn was paid on May 22, 43 3-8 cents; and the top price for No. 2 white was gotten on May 23, 49½ cents being the quotation.

The rule relating to trading done outside the Board of Trade Hall, which was given in my last, has had a most beneficial effect, and meets with the hearty co-operation of all members.

Perhaps the following reports, as handed in to me by the different elevators, denoting the grain on hand at present, may not be uninteresting to the readers of this paper:

Elevators.	Wheat.	Corn.	Oats.	Rye.
Union....	156,628	48,978	969	1,340
Arkansas Valley.....	91,440	34,959	1,646	1,060
Novelty.....	72,381	24,327	1,329	2,254
"A.".....	67,000	24,222	2,009	2,530
Advance.....	55,626	16,639	2,979	.....
Alton.....	67,390	28,798	.....	.....
Kansas.....	61,612	10,083	.....	.....
Inter Ocean.....	47,000	17,875	2,208	.....
Belt Line.....	42,980	5,973	.....	.....

Kansas City has awakened all of a sudden to discover that the Exchange building, which has witnessed the revolution of trade in this section, and which at the time it was built was thought to be large enough for the city for twenty-five years, is much too limited in dimensions for the proper housing of the offices of grain commission men. Merchants here are always quick to act, and now all arrangements are completed to put up a \$300,000 edifice on land which was donated by private parties, the market value of which is \$60,000. This property is situated on Eighth street, between Wyandotte and Central. It is on the north side of the street, thus giving the much-desired southern exposure. The directors will meet this evening to decide upon the plan of the building. It is proposed to make it one of the most convenient and elegant edifices west of the Mississippi; large enough to accommodate any demands for the next twenty-five years. There was a good deal of feeling manifested by parties having property interests in the neighborhood of the present Exchange, such feeling that a removal of such an important interest to headquarters four blocks away, would have a disastrous effect on their rents. This clique was composed of dogged, hard-working fellows, who bent their utmost energies toward defeating the change-of-location scheme. They piped well, but the members of the Board of Trade would not dance, but most emphatically sat down upon them. The greater number of those who were adverse to the move at first have come over and are now reckoned among its most staunch supporters. Some of the more thoughtless have gone so far as to even point out an effective motto to be put in big letters at the head of the new Board of Trade Hall. If their project be carried out, the words will read as follows:

"Old Grimes is dead, that good old man;  
We ne'er shall see him more."

Any way, there is at present happiness and contentment displayed in the average grain dealer's face, that he is at last to leave those old musty basement offices for the pure, salubrious sunlight of a beautiful and attractive building.

The estimated yield of wheat for Missouri is now put at 11,235,941 bushels. This is somewhat better than was reported a month ago. This, however, will be less than enough for home consumption and seed. In Kansas, on the other hand, the prospects are even more disagreeable than last month, the computed yield being between nine and ten million. Members of the Board of Trade are a good deal alarmed at the outlook, as can easily be imagined, and well they may be. Off and on one tries to start a boom for brighter prospects, but on looking up his record he is found to be bearing the market to relieve some of his more unfortunate customers.

The past month has shown an average of 86 for corn in Kansas, and 87 in Missouri. It is thought that the yield of both Kansas and Missouri will be larger than

any year since 1880, except last, which was exceptionally great.

Some cattle men have attempted to raise a scare in Southern Kansas, by sending out their cowboys and spreading the rumor that the Cheyenne Indians are on the warpath and have crossed the frontier. Their object was to create a distrust in the public mind as to the advisability of obtaining claims and carrying on farming. The enterprising farmers have made such encroachments upon their old feeding grounds that the cattle kings had become alarmed, and as a *dernier resort* this nefarious scheme was concocted. The excitement consequent upon it has already subsided, and farmers have not allowed their crops to suffer. Such proceedings as these must prove a boomerang against the schemers. I notice the attention of officials is being called more and more to the greedy acts of many of those unscrupulous men.



[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interests of the trade at large, or any branch of it.]

#### CHICAGO ELEVATOR CHARGES.

*Editor American Elevator and Grain Trade:*—If Chicago loses some of her pre-eminence as a grain entrepot it will be her own fault. The storage charges at Chicago ought to be reduced to meet the reduction that has taken place in everything else. Why do not some of Chicago's wealthy men erect some more elevators? It would benefit the Board of Trade, certainly, and such elevators would probably have no difficulty in getting declared regular. Buffalo has reduced her storage rates, and Chicago must do the same. Business can not stand the tax now that it could a few years ago.

Yours truly, C. R. I. & P.

#### IS CHICAGO TO BLAME?

*Editor American Elevator and Grain Trade:*—It seems to me that Chicago's "bulls" are to blame for the refusal of wheat to move to the seaboard. For the past six months at every time any demand for wheat for export has appeared, straightway the "bulls" boom the market clear out of sight, and the demand ceases. At this particular crisis it would be an unmixed benefit to all concerned if the Chicago Board of Trade had no money to speculate. Markets used to be controlled at Liverpool; there was and is reason for this, for the Liverpool market represents the actual consumptive demand. But now Chicago is rich enough to hold the crop, and evidently her "bulls" are trying to make Liverpool adjust her prices to suit Chicago ideas. We will see how this will result. The climax will be reached after harvest.

Yours, TRAINER.

#### NEBRASKA LETTER.

*Editor Elevator and Grain Trade:*—Whatever may be the status of affairs in other sections of the country, Nebraska still holds on to her "boom." "Everything goes," to use a Western expression, and while there has been a disposition to call a halt by some of the more conservative men, still property of all kinds is rapidly advancing.

The railroads are leading off with numerous branches reaching into new territory. There is not a road in the state but what has new lines building into and opening up what must prove very desirable agricultural and grazing lands. Immigration is following closely after the railroad, and the frontier is rapidly approaching the line of sand hills on the western border of the state.

The enterprising grain men are keeping fully abreast with the railroads, hauling the material for capacious elevators by team for long distances, that they may be ready for business as soon as the first box car is side tracked. In one of the new Western towns, or more properly on a town site, there are already eleven applications for elevators filed with the general freight agent

of the road building the extension. There is a noticeable improvement in the character of the houses being put up that shows their builders are profiting by experience. All over the eastern part of the state steam is superseding horse power, and the entire equipment is far superior to the elevator of five years ago. New houses now in course of erection are, almost without exception, putting in steam power.

Of course this activity in elevator building suggests abundant harvests, or at least most favorable prospects. And such is the case. Crops of all kinds bid fair to yield rich returns. Rye is already taken care of. Wheat is ready for the harvest, which has just commenced in the southern parts of the state. The yield is good and berry plump. Oats are standing up well and will ripen in time to conveniently follow the wheat harvest. There is an increased acreage over last year, and the well filled heads bespeak some heavy yields. Barley is grown in the counties west of Lincoln more extensively than in any other portion of the state, and though of limited area, will market a splendid crop.

But "corn is king." The state exhibit at New Orleans last spring was in every particular a fitting tribute to this great staple cereal. From all sides come encouraging reports for this season's crop. The warm weather and occasional showers through June have brought forward the crop at an astonishing rate. While the plant is not quite so high as at this time last year, still it is of a good, healthy color, and where well tended is having a vigorous growth. You can put down Nebraska as still in the lead of the corn-producing states.

In closing, permit a word regarding the milling interests of the state, which are in a flourishing condition. The mills now in operation are running steadily under a brisk demand. While there are no large merchant mills building, still the number of 50 to 100-barrel mills now under contract was never equaled in the state before.

Just here I would call attention to the fact that Omaha, with all her enterprise, stock yards, new packing house, belt railroad, and magnificent elevators, has to import every pound of flour consumed by her 60,000 people. This matter was made the subject of a vigorous editorial in one of the Omaha dailies a short time ago. Here is a good field for some enterprising merchant miller. Who will occupy it?

Yours truly, A. B. COLTON.  
Lincoln, Neb., July 1, 1885.

#### KANSAS CROPS AND KANSAS ELEVATORS.

*Editor American Elevator and Grain Trade:*—Of all the great winter wheat-growing states of this country, Kansas is probably now receiving the most attention. She receives attention both from friends and foes. In the spring wheat-growing sections of the Northwest, notably Minnesota, who have seen in Kansas a great rival, there seems to be a feeling akin to gladness at the prospect of a virtual wheat failure down here, and they put it clear down, then get on it and tramp it in order to make a dead sure thing of its staying down; but, nevertheless, it won't stay down.

Her foes may traduce, and friends get weak-kneed, but after all Kansas in the end comes up smiling with a fair showing in the wheat crop line. On 'Change in Kansas City, and almost everywhere else, great efforts have been made to figure the Kansas crop below 15,000,000 bushels; but it won't win. "Andy" French and a gentleman from the interior, by name of Hoffman, I think the latter used to be known in Topeka as the "gentleman from Dickinson county," but now, alas! no more, have probably done the most "way down" figuring. Hoffman is evidently long; I do not mean the gentleman himself is long; on the contrary, he is just the reverse; but, judging from the frantic efforts he is making to traduce the Kansas wheat crop, he is the longest kind of a "long" for an interior point in wheat. "Max" Minter, taking Hoffman for a guide, has been disposed to figure the Kansas crop down to about 8,000,000 bushels, but I rather think he is coming around to reason now. The good-natured and genial "Bob" Minter leaned in the same direction, but he is cured. No man living can get him to bet on less than 20,000,000 bushels for the state. The above named gentlemen are prominent grain and commission men and members of Exchange, well-known here.

In the Kansas City *Journal* of July 4, friend Hoffman appears over his own signature placing the Kansas crop at 9,500,000 bushels; quite liberal for Hoffman, but it won't win.

The writer has been over the state more, probably, than



any of the gentlemen above named, and his lowest estimate is 15,000,000 bushels, and if it should be finally figured as reaching in the neighborhood of 20,000,000 bushels he would not be at all surprised.

In the northwest portion of the state the wheat is generally good, some of it fine. Lincoln county will probably harvest the best crop ever grown. Mitchell county will have a good average, and so all through that section. In the southwest it is turning, and much better than was expected.

Be the wheat crop what it may, there is one thing left for Kansas, and that is the corn crop; and should the present indications, with fair weather, hold out a month longer, the old corn-growing states, Illinois and Iowa, for instance, will weep with envy over the corn cribs the Kansas crop will fill this fall.

The general prospects for corn were never better at this season of the year before, nor was ever the acreage ever so large by a big majority as now.

Considering short crop prospects, there is considerable activity among grain men in building and improving. J. P. Campbell is building a fine new elevator in this city, which he expects to have done in time to handle a share of the new crop. Still another new elevator is talked of during the season. The Goodlander Mill and Elevator Co. are putting up a 100,000-bushel house at Fort Scott. That, of course, is chiefly for the purpose of carrying stock to supply the mill with.

At Topeka there has been a company formed for the purpose of building a 300,000-bushel house, and by the time this catches the eye of the reader it will be well under way.

E. E. Clark is building a new mill at Delphos, Kan.; C. W. Lord is remodeling his at the same place.

James Smith, same place, is putting in a new separator and making other necessary changes. W. R. West & Co. are also putting in a new separator and making a sort of a general change in their house.

A gentleman by name of P. C. Staley, I do not know that he has ever been heard of outside the confines of his own little community or not, is building a new elevator at Waterville, Kan. It is about completed now. Another gentleman by the name of Scouten talked of building a new house at the same place, but I am afraid Staley's enterprise has taken the wind out of him, as I have not heard of it for a long time.

A new firm is building a house at Washington, Kan.; to save my soul I can not think of the name of the firm at this moment, but what matters it about the name so long as you get the facts.

A. Z. Rodgers, of Beloit, recently bought one of the old houses at Bennington and is remodeling it, putting in shellers, cleaners, etc. Barnes & Bush bought the other Bennington house and are putting it through the same course of discipline as Rodgers is. Barnes & Bush are also putting a new separator in their Minneapolis house. Recently a fire destroyed the elevator of C. W. Nall & Co., at Chapman, and they are pushing a new building along with commendable energy.

The above are simply a few improvements I call to mind at the moment of writing.

Yours truly,  
Kansas City, July 6. ABERNATHY.

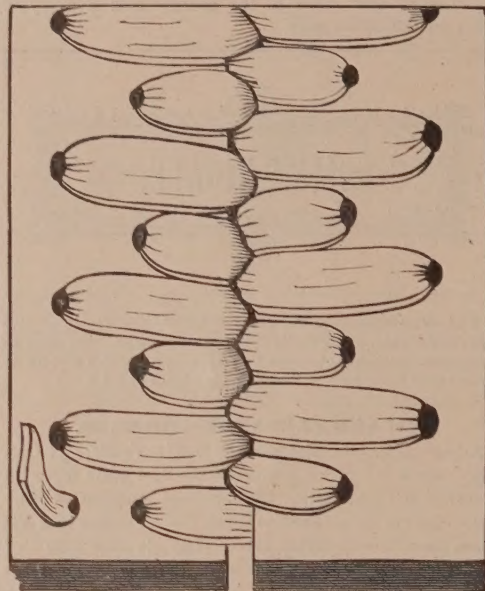
### REBATES TO SHIPPERS.

"Some of the elevator men have been around among the shippers," says the *Chicago Tribune*, "and offered to make a rebate of storage charges on wheat on condition that the grain be taken out of certain elevators. Their motive was, however, not to relieve the trade of the burden under which it is suffering, but to make room for wheat which it is understood is to come to this city if convenient storage places can be found for it. In a few cases this offer was accepted, but a reduction of that sort is of course no advantage to the business. What is wanted is a general reduction, applying to all grains and to all persons. Until this step is taken Chicago will be at a disadvantage in its competition with other towns that handle grain. Europe is getting from other centers wheat that we ought to be furnishing, and meanwhile our stock is increasing at a time of the year when it ought to be rapidly melting away. And we are drawing near the time of the year when the new crop will be sent to the distributing centers of the country. We could increase the business here handsomely if the rates were cut down to a reasonable level, but there is serious danger that, with the storage expenses just as high as

when other things were 25 to 100 per cent. higher than they are now, we shall lose a large part of what properly belongs to us. Some bills have been offered in the Legislature for the reduction of these rates."

### A BELT LACING.

Mr. Robert Abbey, of the "New Era Mills," Leavenworth, Kan., sends to the *American Miller* a sample of belt lacing, which we reproduce below. Mr. Abbey writes: "I never saw this plan in use before I used it. We have in this mill a belt 11 inches wide, which drives two double sets of 24-inch rolls and a large size Morgan Scourer. Sewed in this way, it has run for twelve months and appears to be all right still. We also have



elevator attached to the mill, the belts of which are sewed in the same way. One of them has run six months, and is as good, apparently, as ever." The holes in the engraving are shown as punched closer to the end than they should be; the double row of holes is to get the most strength.

### THE HESSIAN'S RAVAGES.

It is quite likely that at the West, as for a long time at the East, the Hessian fly is now depredating with no check from the parasites which in Europe have kept it within reasonable bounds. In the Eastern wheat growing states the Hessian fly was formerly much more destructive than it is at present.

Bad farming lies at the bottom of much of the complaint about insect ravages. We do not vary our crops sufficiently, and so long as we do not we shall be troubled by insect ravages. The Hessian fly is a case in point, for it undoubtedly owes much of its destructiveness to growing wheat after wheat in succession. It does not appear that the female fly is much of a traveler. She certainly does not need to be when wheat is grown on the same ground where she was hatched and reared the previous spring and summer. Considerable scattered grain is dropped in every harvest-field, and as this germinates it makes a suitable place of deposit for the eggs of stray specimens. Could we rid our fields of self-sown wheat every year the Hessian fly would soon cease to be troublesome. Four years ago the great drouth, which extended from harvest time until October, prevented the germination of self-sown wheat until the ground was about to be frozen up for winter. The following season our winter wheat crop was one of the largest ever grown in this country.

Any great departure from ordinary temperature is likely to derange the balance between insect and vegetable life, and thus prove injurious, however favorable it may seem at the time. Last fall nearly all farmers rejoiced at the postponement of frost until long after its usual time, allowing late-planted corn to ripen perfectly. But the wheat which came up in this dry, hot weather was all infested by the fly, and its renewed attacks this summer are only what might have been reasonably expected. We might better have lost a portion of our corn crop than to lose so much of this year's wheat.



The Stilwell & Bierce Mfg. Co. of Dayton, Ohio, were awarded a medal of first-class for their Lime Extracting Heater; also another for open heater, by the judges of the World's Industrial Exposition.

Dickey & Pease, Racine, Wis., have just shipped thirty of their large Warehouse Fanning Mills, eighteen large flaxseed cleaners, and seven Giant Dustless Separators to South America. This shipment was the result of sample machines sent some six months ago on trial.

The Cambridge Roofing Company furnished Washburn Mill Company, Minneapolis, Minn., 300 squares corrugated iron siding and 85 squares Crowl's patent roofing for their new "Lincoln mill" at Anoka, Minn. Their Crowl's patent roofing took first medal at the New Orleans Exposition.

The Cincinnati Corrugating Co. have issued a circular, in which they say: "We have the pleasure to announce that this company, having entered its exhibit for competition, is awarded the 'Gold Medal of the First Class' for 'Corrugated Iron for Building Purposes' by the World's Industrial and Cotton Centennial Exposition, at New Orleans."

The Roller Chain Belting Company, Columbus, Ohio, have issued an illustrated descriptive catalogue of the Legg Anti-Friction Roller Chain Belting. This belting is especially designed for elevators, conveyors, drags, drive belts. The catalogue will be found of interest, as it shows by illustrations the many ways in which this belting can be used to great advantage.

Borden, Selleck & Co., Chicago, general agents for Howe Scales, report business improving. Among their sales lately we find the following purchasers: N. H. Warren & Co., Friend, Neb.; Douglass & Stuart, Chicago; J. P. Campbell & Co., Kansas City, Mo.; Capitol Elevator Co., Topeka; G. A. Weiss, Chicago; M. Brand, Chicago. These parties have bought Rail Road Track Scales and Hopper Scales of from 500 to 1,000 bushels' capacity.

The Medart Patent Pulley Company, of St. Louis, say that trade is still keeping up with them. They have recently taken orders for outfitting with pulleys, shafting, hangers, etc., an elevator at Fort Scott, Kan., an oil mill in Alabama, a furniture factory in Chicago, the agricultural and mechanical college at Auburn, Ala., an establishment at Slater, Mo., the Pacific Laundry, city, and through the Webster-Comstock Manufacturing Company, three or four elevators. To the Blackwell-Durham Tobacco Factory, Durham, N. C., they recently shipped fifty pulleys, making 250 all told furnished that establishment.

When the World's Exhibition opened its halls in New Orleans, Erie manufacturers were among the first to take space. In the main building the firm of Skinner & Wood, now the Skinner Engine Co., took a section and placed thereon a portable engine and boiler, a detached engine, stationary engine, and portable boilers. In reporting the award of the judges the *Times-Democrat* notes the following: "3503, Skinner Engine Co., Erie, Pa.—Medal of the first class for best stationary and semi-portable engine for plantation and general purposes; medal of first class for best collective display of light engines and boilers; medal of first class for best portable boiler." As if qualifying the eminence to which the Erie firm had attained in its production of machinery, the judges went beyond their requirements and added to the gold medals offered for this department the special mark of commendation.—*Erie Herald*.

The St. Paul *Pioneer-Press* estimates the wheat crop of Minnesota at 32,695,000 bushels, and Dakota at 24,000,000 bushels.

If Illinois yields only the 10,000,000 bushels that are now promised her people will require two-thirds of the wheat now in store in this city to make good the deficiency, because the present population is about 3,600,000 souls, and five and a half bushels per head for bread and seed gives a home requirement of 20,000,000 bushels before a single kernel can be exported.



## A GRAIN SHOVELING MACHINE.

Perhaps no operation connected with the handling of grain is so interesting to the uninitiated as the unloading of grain cars by means of the power shovels which have now grown into such common use in our larger mills and elevators. Such is the case, at least, with foreigners who visit our elevators for the purpose of seeing how the "American elevator" is operated.

Not long since the writer stood with an English gentleman along one of the tracks inside the great Rock Island Elevator "A," watching the unloading of a train of cars filled with corn. The rapidity with which the shoveling-out process was accomplished was marvelous, and caused the trans-atlantic visitor to exclaim at the practical ingenuity which he found in America on every side. "I see, partially," he remarked, "why it is that you can sell your grain in competition with that of countries with the poorest paid labor in the world."

Soon after the millwright of the Rock Island Elevators, Mr. Tapper, chanced along, and in response to an inquiry he said that the machines were those of Mr. Wm. H. Lotz, of this city. "They have now been in use about three years, and in that time have certainly proved their superiority over the ordinary power shovel in a variety of ways. In the first place there is a great saving in the wearing of the ropes. Here is a rope that has been in use for seven months. With some shovels a few days of such steady work as the shovel has been doing would have sufficed to end the usefulness of that rope.

"We have eleven double machines in this house, and, except such annoyance as we have with all machinery in elevators, due to the constant settling, they have given us little or no trouble. The machine, as you see, is perfectly automatic, and the length of pull on the ropes can be adjusted in an instant. As you will perceive, the machine is almost noiseless, in which respect it is a great improvement on the clutch machine. Then, too, the saving in shovels and lubricating is an important point.

"The reason why the machine is not so destructive on shovels and ropes and runs with so much less trouble is due to the fact that the friction pulleys slip when the scoop happens to meet with more than ordinary resistance, such as a bolt in the bottom of the car, or the like.

"Another point which is favorable to this machine is the ease with which the scoop can be carried back into the car. In fact, the machine seems as nearly perfect as it is possible to get a machine of this kind."

By this time the train had been unloaded and the engine hauled the empty cars out of the building; so bidding our informant good-day we departed, with a little more pride for things American and things Chicagoan than when we entered.

## THE ILLINOIS WAREHOUSE COMMISSION.

A letter from the secretary of the Transportation Committee of the St. Louis Merchants' Exchange, has been filed with the secretary of the Railroad and Warehouse Commission, complaining that the uniform schedule of freights adopted and enforced by the commission works a hardship and injures the flour and lumber trade of St. Louis. The letter sets forth that prior to 1885 St. Louis millers and grain merchants had a trade with Chicago amounting to a half-million barrels of flour besides large quantities of grain annually, on which they had rates they could easily stand and thereby increase their trade. It says that since the establishment and maintenance of the advanced rates, 13 cents on wheat and 12 cents on flour from East St. Louis to Chicago, the trade in these commodities has dwindled into insignificance and that they are deprived of legitimate trade and the railroads of fair earnings. The letter further recites that the railway officials claim that they are compelled by the rulings of the Board to make a lesser rate to intermediate points than is current to terminal points, and that the railway officials would gladly meet the demands of the St. Louis shippers if they could do so without sacrificing the profits on their local business. The St. Louis Transportation Committee asks that the commissioners shall consider business between St. Louis and Chicago as inter-state traffic, which places it outside of the jurisdiction of the State Board of Railway Commissioners. This transportation committee also asks if the railway commission claims jurisdiction over rates from East St. Louis to Chicago on cars of freight under

through bills of lading dated at points in Missouri and consigned to parties in Chicago, also at what point would the jurisdiction of the commission come in where live stock, loaded at the Union Depot, St. Louis, and shipped on the Chicago & Alton Railroad to some point in Illinois, where the stock would be conveyed across the river by boat and loaded on cars in East St. Louis, consigned to parties in Chicago.

This letter of propounded inquiries will be laid before the commission at its next meeting, July 17, in Chicago. It certainly must be with a degree of some hesitation that the board will pass upon these questions, as in form they are only hypothetical. If a case setting forth the facts with plain proof could be laid before the board for its decision, that body would find it much easier to make a decision than to render an opinion on a hypothetical question.

## BATES' "CHAMPION" RAPID GRAIN DRYER.

Something which apparently is wholly and radically new in grain drying will be found in this invention. The principal claims made for it are simplicity in construction and operation, the very thorough manner in which it can accomplish extensive work and the absence of the cumbersome machinery and other appliances usual heretofore in efforts to dry on an extensive scale.

In this instance the dryer proper, where the air which does the work is prepared, is a unique arrangement of steam pipes and moisture retainers. This air, which is rendered very dry, is forced into the drying compartments over which rest columns of grain, through which latter the prepared air is forced rapidly and continuously with the necessary result of drying the article if properly brought into contact with such air.

Mr. Bates, the inventor, is an old grain dealer who has all along been familiar with the various systems of drying that have been brought forward from time to time. He presents this as the result of his years of experience and observation. He claims the only limit that there can be to the capacity of his drying apparatus is space and power, that with the necessary space and power 10,000 bushels can be dried as quickly as 1,000 bushels, and that his invention is not only absolutely safe against fire but the dryer can be put anywhere inside or outside an elevator or building in space of no value for any other purpose. He also claims not only unlimited capacity and economy in construction and operation but in space necessary for the whole apparatus, the whole arrangement being very compact. His methods for cooling the grain instantly with dry air are, we should say, hardly capable of improvement.

In point of economy the inventor has aimed to excel. The cheapness with which large quantities of grain can be handled and dried and low cost at which his dryer can be worked under any circumstances, are important points in favor of his method. The invention will be found advertised elsewhere.

## THE AGRICULTURAL DEPARTMENT'S FIGURES.

The June report of the Agricultural Department shows a slight improvement in winter wheat, which advances the general average between two and three points, or from 62 to nearly 65. The winter wheat region, which does not include the territories, now promises about 215,000,000 bushels.

The condition of spring wheat continues high, though the average is slightly reduced, being nearly 96. Indications now point to a crop of about 148,000,000 bushels, making an aggregate of 363,000,000 bushels.

Corn—The condition is higher than in any year since 1880, except the last. The area is 74,000,000 acres.

Cotton has made a material improvement during June. The average condition has increased from 92 to 96.

The area in corn this year is probably larger than ever before. It is, all things considered, our most important crop, and of late years it figures more largely in our exports every season. A good corn crop would go far toward replacing the deficiency in wheat. In large sections of the West corn bread will be more widely used by farmers than it has been for many years. But in cities the poorer classes do not take kindly to corn bread as food, and it will need much higher prices for flour than now prevail to greatly restrict the consumption of the latter.

[Written for the AMERICAN ELEVATOR AND GRAIN TRADE.]

## GRAIN, ITS STOWAGE, STORAGE, AND PRESERVATION.

(Continued from last month.)

Another system of ceiling, the invention of F. Dassori, is highly recommended. It is said that it prevents the cargo to shift or settle in any way in the hold, owing to the fact that the center of gravity cannot be transferred from the middle of the vessel, thus preventing the vessel from getting on her beam ends. It is, of course, a well-known fact that all the most severe disasters, entailing both loss of life and property, have occurred by the shifting of the cargo, and consequent throwing of the vessel on its beam ends. It is also a very common occurrence for vessels loaded with grain in bulk, or bulk and bags, to arrive at the port of destination with the cargo damaged by water from the deck stanchions and waterways, as well as to have under the floor great quantities of damaged grain passed between the planks of the ceiling. This grain very often finds its way to the pumps, choking them up, often entailing total loss.

The safest way, it was thought, was to load the vessel with one-third bags, but they have been found by practice not to answer the purpose claimed for them. Besides, bags can "bleed," and will allow the grain to shift. Besides the bags themselves, with insufficient dunnage underneath, sink, and when diminished by leakage, can shift sufficiently to give the ship a list. By the construction of the inclined ceiling, as shown in the drawing, the cargo is confined, and shut in the middle of the vessel. The center of gravity can by no means be transferred from the middle of the ship, so that it will be an absolute impossibility for the grain to shift so as to throw the vessel on its beam ends.

From the termination of the plank ceiling, that is, from about the water line to the floor, strips of wood are placed vertically, single or in pairs, at a little distance from one another, as shown in cut, and over these strips is laid prepared cloth, felt, or other suitable material. The cloth or felt prevents the grain from sifting through the ceiling into the sides and bottom of the vessel, and choking up the pumps. The strips, as shown, form ways or channels in connection with the superposed ceiling to conduct any water that may drop from the deck down to the bottom and well of the vessel, thus securing a dry cargo. These strips also form channels for ventilation. This felt cloth may be rolled up and stowed away as soon as the grain is delivered. The inclined or arched plank ceiling is permanent. The ship is loaded under the elevator almost automatically, and the vessel, when loaded, is in good trim to ride a gale with safety and stability. These inventions are the more important because, great as is the number of vessels engaged in the grain trade, the number is being constantly swelled by additions; and we have been informed by a prominent inspector that they have doubled in ten years. Therefore anything that shall tend to the greater safety of these bottoms, whether on ocean or lake, and their cargoes, should be welcomed. The difficulties in the trimming of grain cargoes are very many, and the work is so often badly done that portions of the hold are left unfilled with grain, so that on the first touch of rough weather the cargo will shift, thus destroying the equilibrium of the ship. A system which has been lately introduced in New York takes up the grain from the barges through one or more tubes by the power of compressed air injected into the tubes, so that it produces a powerful suction and force within the tube, sufficient to transfer large quantities of grain per hour into the receivers for weighing, or direct into the hold of the vessel. Here, instead of allowing the grain to fall through the hatches to the bottom of the vessel, it is conducted through an improved apparatus by force of compressed air again in a stream to various parts of the hold, completely filling up every space with grain in a compact form. At the same time the contact of the grain with the air at low temperature improves its condition for keeping sweet during a long voyage. Steam is used to compress the air, but the expense of the machinery and the cost of running it is said to be cheaper than by the old method. This is a great advance over former methods. The handling of grain for export or for interior transportation and transfer in New York till about the year 1843 were limited to sacks, and done by manual labor. It was transported on the lakes in barrels or sacks, but occasionally in bulk.

In 1843 Joseph Dart, of Buffalo, first conceived the



plan for handling grain by steam power in transferring it from lake vessels into warehouses, and the delivery of the same to canal boats. This enterprise was looked upon with doubt by a majority of the commission merchants and carriers on the lakes and canals then doing business in Buffalo. Bulk grain, even as late as 1847, was mostly handled in Buffalo in half barrels or tubs, by which it was taken from the hold of lake vessels, weighed by scale and hopper on the decks of canal boats to which it was to be transferred. The first elevator built at Buffalo was by Joseph Dart, and had a storage capacity of 55,000 bushels, and a transfer capacity of 2,000 bushels per hour. Several other grain warehouses of a similar character were built during the period from 1847 to 1856. The number in Buffalo was later increased to thirty-two, with a capacity to transfer 4,000,000 bushels of grain in forty-eight hours. Similar elevators attached to grain warehouses have been built at Chicago, Milwaukee, Toledo, Detroit, Cleveland, Duluth, Pittsburgh, St. Louis, New Orleans, Indianapolis, Peoria, Dubuque, and many other interior points in the West, Northwest, and East.

It is only a short time since the grain arriving at New York from the interior, whether for domestic consumption, shipment to the East, or for foreign export, was handled in half-bushel measures, and every tenth bushel weighed. An attempt to introduce floating elevators in New York encountered great opposition from the army of measurers that had had a monopoly of the handling of grain, and in the contest between the measurers and the elevators, business was suspended almost entirely for two weeks, but at last steam power and hot water was superior in force to the army of measurers, and came off victorious. There are now in New York and Brooklyn sixty-five stationary grain warehouses, including stores, with a storage capacity of 12,500,000 bushels, and thirty-five floating elevators, with a transfer capacity of both in the aggregate of 200,000 bushels per hour.

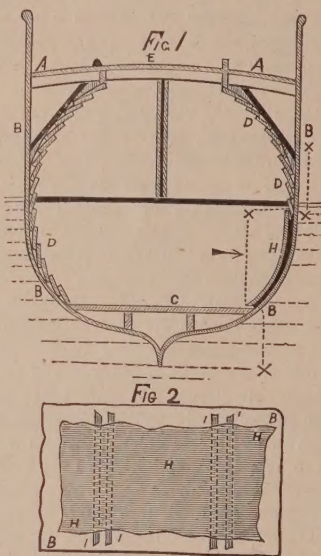
Before engaging to load a ship, an exporter considers if the vessel is qualified in every respect to take grain. Where doubt exists, every effort should be used to remedy the presumed defects. It is not sufficient that a vessel should be what is termed "tight, staunch, and strong," for, if built or repaired with any timbers or planking liable to produce an injurious steam when saturated, or liable themselves to steam when heated by grain, the consequences will not be satisfactory. It is in part for this reason that ships built of iron are occasionally preferred. Grain should not be stored in a ship, the hull of which is pickled, or which has recently discharged salt, or one the ceiling of which was recently painted or varnished. The effects of bilge water are most insidious and pernicious, and the mischief is increased with the introduction of loose grain into the timbers. Where decomposition creates an exhalation of a very offensive and detrimental character, this liability is increased by rats which sometimes cut holes through the ceiling. The decks and waterways should be perfectly tight before loading, and kept so by throwing water over them. More injury is done by a small leak here than a large one elsewhere, for although considerable leakage occurs in the hull, yet if the pumps be regularly attended to the cargo remains uninjured, while a pint of water, or less, dropping through a deck seam, may start heating, and lead to the damage of the entire cargo. The decks should be repeatedly wetted when standing in harbor under the rays of the sun, and should be covered during the day.

In mixed cargoes it is desirable that grain, whether in bulk or bags, should always be stowed in one distinct compartment. However dry grain may apparently be when shipped, it may sweat on the voyage, and damage other goods which may be near. This is particularly the case with flour, whether in barrels or sacks. Several instances have occurred where flour has been damaged in this way when exported to Europe from this country. Flour will heat and turn sour when stowed by itself. It may be taken for granted that fermentation and heating of grain cargoes, however long the voyage, will never take place without the presence of moisture, for in the case of hard wheat in a perfectly dry state, if free from weevil, it may remain for an indefinite time without injury, provided moisture be entirely excluded. But there is always a dampness about the hold which in time will have some effect in producing damage, which increases after once beginning—at first slowly, but at each step more rapidly than the one previous; in fact, in a geometrical ratio. When fermentation does commence, and a portion of a cargo commences to heat, a vapor will

arise and be condensed against the under part of the deck, whence it falls back in drops on the grain, and so increases the damage. Ventilation is then needed, even though there may be weevil in the cargo; for although ventilation may cause the weevil to increase, the damage thereby will probably be less than by the additional fermentation and injury from condensed moisture if ventilation be neglected.

It may be inferred, also, that there is considerable moisture in all new grain unless it be the produce of an exceedingly dry climate; this moisture is not apparent, or sufficient to cause damage during short voyages; the exterior may be perfectly dry, but in chewing it a degree of toughness and mealiness is apparent. When grain is brittle, approaching to rice in its character, it will sustain the longest voyages without injury. From New York to Europe is considered a short voyage in a steamer and a long one on a sailing vessel, but too much precaution cannot be taken in shipping grain on either.

When grain sustains damage from moisture, at first it swells; fermentation then takes place. Organic matter is decomposed, gases are evolved, and heat is produced. The vapor condenses against the deck and sides, which,



from water washing over them, are cool enough, even in warm latitudes, especially during the night, to produce this effect. While discharging a fermented cargo, ventilation should be maintained, or the injury will be greatly increased. It is always desirable to import wheat into Great Britain during the winter months. When a voyage is made in the summer, unless the wheat is very superior, and is shipped in exceedingly good condition, it is almost sure to become heated; soft wheat is especially liable, and, of course, more so when damp. In heated cargoes the upper part is always most injured, because that part suffers from the aggregate heat of the entire cargo. Increase of measure is generally caused more by the roughness of the grain, which prevents it from fitting so closely into the measure, than by any actual increase in the bulk of the grain itself; therefore, a damaged or heated cargo may have settled into a hold when sound, and although, apparently, the vessel be not full on arrival, yet on measuring out the cargo it may be found increased in measure, according to the nature of the grain and the damage sustained, from 5 to 10 per cent., or even more, so that the cargo could not be put into the same vessel again unless brought back to its original good condition and weight per bushel, when it would be found to have decreased in quantity from 3 to 5 per cent., or more, when being dried.

A dispute often arises between masters of vessels and consignees with regard to the difference in quantity between that stated on the bill of lading and that delivered; the difficulty is increased through the uncertainty of the cause. In the first place, the weight of the grain is not uniform in all parts, and it varies with the seasons; next, there may be a discrepancy in the weights and measures, but the principal source of dispute is from difference of bulk by leakage and fermentation. Difficulties often arise from cargoes being more or less heated, not in consequence of sea damage, but because they are shipped in a moist condition. Heating, they swell, and objections are then taken to the quantities discharged being ascertained by measure, because it is said that the merchants pay freight for bulk, not of good, dry grain,

but of deteriorated, heated, and swelled grain. In the comparatively few cases in which the deterioration arises from some fault in the vessel, the shipowner has no cause to wonder at the merchant's dissatisfaction. But when the damage arises from the grain being shipped in an unfit condition, or from storms and the casualties of the voyage, it is hardly fair to reduce the amount for the freight. This is an important subject for American grain merchants, exporting, as they do, the largest quantity of grain from any country in the world, and they cannot know too much about this subject.

Between the months of November and April, when inland navigation by lake and canal is usually closed, the shipment of grain from New York is not extensive. Considerable quantities are then brought to that city by rail. About the beginning of May dealers are busy, and by the middle of May ocean shipments begin. Canal navigation to New York is generally closed about the middle of November, and is opened in May, and sometimes earlier. The navigation by canal is very extensive, and in order to prevent canalboats from being frozen in it, it is necessary that all should be out before the gates are closed. The practice involves an occasional loss of several days, each end being closed on the same day.

It is customary to load grain in New York both in bulk and bags. The proportion in bulk is generally about the extent of the register tonnage; the rest is in bags. The insurance companies don't care about accepting any policy on a ship carrying more than her register tonnage of grain in bulk, unless she has compartments built expressly, or a certain proportion in bags sufficient for her safety. From New York to Great Britain one per cent. is usually allowed in the charter for deficiency of weight.

When vessels are loaded by the elevator it is necessary to stop it occasionally, or the grain cannot be properly stowed. Otherwise, when the ship proceeds to sea, and is in motion, the grain shifts to leeward, and almost invariably works through the ceiling into the pump wells, and chokes the boxes. It is therefore necessary to stow grain in sections, not to contain more than 12,000 bushels, to be ceiled with boards grain tight, not less than ten inches from the flat of the floor, and about fifteen inches in the bilges, graduated to the sides which must be clapboard ceiled to the deck. Shifting plank two inches thick must extend to the deck on each side of the stanchions, fitted tight under and between the beams, and extending not less than six feet downward, and great care must be taken that the stanchions are well secured at both ends. Serious deficiency in quantity often occurs in ocean cargoes, and the law is not very satisfactory as to the security in such documents as "bills of lading" to the holders.

The deficiency in quantity, when it does occur in ocean shipments, may be attributed in part to the masters and mates being less careful than they should be in examining weigh's and keeping an account of the shipments. Wheat is occasionally chartered by weight, and so many pounds per bushel, and merchants sometimes allow one-half per cent. for decrease of weight of wheat from Biscay ports to English Channel ports, and one per cent. from American ports. Cargoes of Indian corn and of wheat from American ports to Europe should be battened down, and every aperture closed to prevent the increase of weevil, which cannot exist without air. Their ravages are greater on the surface of a bulk of grain than in the interior, where the air does not circulate so freely; turning will, therefore, in such cases, do harm. Indian corn does not shrink in heating like other grains, but expands, and gains in measure, and loses in weight the same as other grain. Cargoes of grain from the Baltic for England scarcely ever reach 8,000 bushels. This may be owing, partly, to the shallowness of the Baltic ports. In Prussian ships the ordinary dunnage is covered with mats, which extend up the sides, and are considered injurious by some merchants, because, in the case of leakage, they take up the moisture, retain it, become mildewed, and cause heat and consequent injury to the cargo. The produce of Poland, from Kieve northward around the shores of the river Dwina, is sent to Riga, where it is disposed of to merchants or warehoused.

The river Bug has many windings, and its navigation, which is tedious and uncertain, can only be attempted in the spring, when the water is high. It is the same, although in a less degree, with some of the rivers that fall into the Vistula before it reaches Warsaw. The



navigation of the Polish rivers in some seasons is more than usually difficult, and grain from the upper provinces does not reach Dantzig until from two to four months later some seasons than others. There are two modes of conveying wheat to Dantzig by the Vistula. The wheat which grows near the lower parts of the river comprehending Polish Russia and part of the province of Plock, which is generally of an inferior quality, is conveyed in covered boats, with shifting boards that protect the cargo from rain. They are long, and draw about fifteen inches of water, and carry about 1,200 bushels. These vessels are not, however, so well calculated for the upper part of the river. Barges of this description are about 75 feet long and 20 broad, with a depth of 30 inches. A large tree, the length of the vessel, runs along the bottom, to which the timbers are secured with wooden pegs, and the corners dovetailed and secured with light iron clamps. Hurdles are laid over this, and they are covered with mats of straw that are made to serve the purpose of dunnage. Vessels of this description draw from ten to twelve inches of water, and yet they frequently get aground in descending the river. The wheat is thrown on mats, piled as high as the gunwale, and left uncovered, exposed to all the inclemencies of the weather.

During the passage the barge is carried along by the force of the stream, oars being merely used at the head and stern to steer clear of sandbanks, and to direct the vessel in passing under the several bridges. This mode of navigation is necessarily very slow, and lasts several weeks, and even months, and if, during its progress, any rain falls, it causes the wheat to grow, and the vessel speedily assumes the appearance of a floating meadow. The shooting of the fibers soon forms a thick mat, and prevents succeeding showers from penetrating more than an inch or two. The natural covering protects the cargo, and when it is thrown aside the main bulk is found in tolerable condition. When the cargo arrives at Dantzig it is dried in the sun previous to its being stored. The warehouses are well adapted for storing grain. They consist generally of seven stories, three of which are in the roof; the floors are about nine feet asunder; each is divided into perpendicular partitions, the whole length, about four feet high, by which different parcels are kept distinct from each other. In each floor there is an abundance of windows, which are always thrown open in dry weather for ventilation. The grain is usually turned over three or four times a week, and is thrown high so that the grains are separated from each other, and are thus exposed to the drying influence of the atmosphere.

In New York City the loading of ocean steamers is effected by means of the floating elevator, and it has been found quite convenient in hauling or towing boats to the side of the vessel and then transferring the cargo from one to the other. The methods of storage in various countries, and means adopted for the preservation of grain will be the subject of the next articles.

[TO BE CONTINUED.]

## THE HOLDING OF GRAIN IN THE NORTHWEST, A REGULATOR FOR THE TRADE.

BY W. T. STACKPOLE.

The grain trade of the world is now, has ever been, and must ever continue to be one of foremost and greatest branches of commerce among mankind. Hence, whatever will contribute to the truest, soundest and best condition of this great branch of commerce is for the common and general welfare of all. The idea of plethora and of an actual overproduction is not new. Far from it. The great and sublime lesson of the sacred book, whose scene was laid in that wonderful valley where still stand, through all the changes and ravages of time, the stupendous works which attest to us of today the genius and power of the mighty past in Egypt; should be wisely, fully and reverently studied and understood. History now presents to us the whole historic past in a vast succession of lessons, without some attention to which a wise conduct of affairs is impossible.

Seed time and harvest have not failed "on the earth," and we need not fear that they will fail. But localities and periods have and will continue to suffer scarcity and want. Hence the need of careful preservation and storing of grain in bountiful seasons, when English and American "bears" seem quite willing to destroy not only their opponents, the "bulls," but also the producers and all dealers, and eat the very heart out of commerce itself.

Nothing in the history of modern commerce is more remarkable and more important to rightly understand than the recent nine years of vast deficiency in Great Britain, and the means by which that very deficiency has been supplied at prices below the cost of production, and this even after the astonishing advance in labor-saving machinery, and in the economy of transportation. The leading factors in this astonishing set of results have been kept hidden; and while hidden each year's surplus in our country has been about all drained away, even in our best years of good crops. And it would be folly to attempt to unfold them in this article. Nor is it at all necessary to do so. Other large and plain facts must be recognized as true and correspondent with our country's interests and that of all its people and of the world.

The greatest portion of the gross productions of the earth, designed for human food, are perishable and can not be stored or kept any great period of time. In warm countries where Nature's provision of food seems most bountiful, this is especially the case. In Ancient Egypt the keeping of supplies from the seven years of bountiful production to the seven years of scarcity seems to have been confined to grain. And this was by superior methods and in a dry and pure climate. The great rice crops of Southern Asia, which now feed one third the population of the world, could hardly be kept as long as Pharaoh kept the grain crops of the Nile Valley under the stewardship of Joseph. The safe keeping of a surplus then as now is the sensible and proper safeguard against want, famine and death.

It is said that one acre of plantain (or banana) in the South will furnish as much human food as fifty acres of wheat in the North. In traveling through Central America the writer was struck with the great ease and certainty with which a poor family could gather subsistence daily the whole year round from a small patch of plantain. And this almost without labor. But while in the tropics, throughout the Eastern and Western Hemispheres, nature is so bountiful, yet most of her fruits are exceedingly perishable. Hence, when failure comes through drought or any form of destruction famine becomes a terror as great as in the frozen North; and within a few years this has been illustrated even in Brazil, where the population is as yet scanty, and most of the land uncultivated. Here, owing to unexpected drought, supplies were suddenly cut off, and thousands of men, women and children perished miserably from famine in spite of what efforts the government was able to make in behalf of its remote and suffering subjects. Steam navigation on their rivers, and steam navigation (marine and inland) in this hemisphere, together with railways, will open a commerce, cheaply exchanging all American commodities from the Arctic to the Antarctic, that is as yet scarcely even dreamed of. This is shown by the apathy and indifference in our country as to the Darien and Illinois Canals.

At present it is an island off the northwest coast of Europe that fixes the price of all our grain. This arrangement is not in conformity with the physical structure of the world or the needs of modern commerce. It is against our interests. It is against the interests of the world. The remedy for it is very simple. It is in conformity with the general interests of all producers, all consumers and all commerce. It is represented by the American and Russian granary; by the sound, commercial and cosmic policy of wisely storing up and supply keeping grain in times of apparent plethora, as a reasonable provision for the inevitable periods of scarcity, which must occasionally occur everywhere over the whole world. The really successful farmers of Europe and America have always recognized more or less the error of the ideas of "overproduction." But of late the pressure has been so strong to induce the forced selling of wheat even below cost, when that cost had been reduced by every possible means, that even the very idea of storing up in times of abundance has been discredited. But it is every way sound. And dark and gloomy will be the day for all, and ruinous to England, when our country, misled by the policy of annually selling all its surplus, finds itself suddenly confronted with a short crop or two, and is compelled (as it has sometimes been) to import wheat. The real conditions that now exist in the world would then be disclosed when too late to avert disasters, easily averted by just and sensible attention to well-established facts—that is the duty of all to heed.

The Howe Scales took first premium at Philadelphia, Paris, Sydney, and other exhibitions. Borden, Selleck & Co., agents, Chicago, Ill.

## LEGAL NOTES.

### Warehouseman's Liability—Delivery of Grain.

Where the consignee of a carload of oats had the same sent to the defendant's elevator for storage after having made a contract for the sale of the same for cash, and upon receiving a check for the price, which proved worthless, gave the purchaser the sampler's ticket of the number of bushels, the grade, etc., with the price indorsed thereon, the custom being to give in addition thereto a written or verbal order on the warehouseman for the delivery of grain so stored when sold, the Supreme Court of Illinois held that the defendant was not authorized to deliver the grain to the holder of such a ticket, and a warehouse slip, not a receipt.—*The Peoria & Pekin Union Railway Company vs. Buckley et al.*

### The "Gambling Law."

A peculiar suit was begun in the Superior Court of this city, June 30, by Samuel Berkowitz against John T. Lester and Charles Schwartz, composing the Board of Trade firm of John T. Lester & Co., under the provisions of the gambling law. The declaration states that one Edwin Partridge, between Jan. 1, 1883, and Feb. 8, 1884, more particularly on the latter date, lost to the defendants the sum of \$150,000, by making bets and wagers upon the future market prices of certain shares of the capital stock of certain railroads and other corporations and of certain mortgage bonds of said corporations, and of certain grains and other commodities, the future market prices being unknown to either parties, and being unknown and contingent events, and thereby gambling transactions under the statute. The act provides that when the losing party does not sue within six months to recover the amount lost any other party may bring suit to recover three times the amount and retain one-half of the sum collected for his own use, the balance going to the county. Mr. Berkowitz now hopes to recover a snug sum for himself, and also benefit his fellow citizens as well, if he recovers the \$450,000 sued for.

### Liability for Damaged Goods.

R, a pork dealer at Dubuque, Iowa, wrote to R, a provision commission dealer in Chicago, offering him five carloads of "fully cured pickled shoulders," free on board at Dubuque. R, on behalf of U, a dealer at Pottsville, Pa., bought two carloads, and directed them to be shipped to Pottsville to his order about a week later. This was done; 140 tierces were sent in good condition; they were inspected by an employe of R. The shoulders were sufficiently iced to keep cold until the cars got to Chicago. M found the shoulders bad for smoking when he received them; and sued for damages on an implied warranty of quality. He offered to show on the trial that on the arrival of the pork at Pottsville the cars contained ice; that when it was exposed for smoking it was bad; that he had sold some of the meat to his customers by whom it was returned as bad; that a well-cured shoulder should stand several days before smoke in the month of August, and, by an expert, that if the pork had been shipped sound it would not have become bad if it had been properly cured. These offers were objected to, but the trial judge overruled the objection, and on the evidence charged the jury that by the terms of the contract the defendant was bound to supply meat that was sweet, sound, and fit to be sold in the trade. The plaintiff had a judgment, and the defendant carried the case, Ryan vs. Ulmer, to the Supreme Court of Pennsylvania, where he succeeded. Judge Gordon in the opinion said: "We have no hesitation in saying that the court below carried the doctrine of implied warranty too far. No rule that we know of goes to the length stated. Under the English decisions as they now stand, where the vendee has had no opportunity to inspect a warranty, he has the right to require a salable article, but nothing more; and he cannot insist that it shall be of any particular quality or fineness. But we do not think the facts here raise any kind of a warranty. In the way of conditions of sale we have but the order of the broker or his correspondent for the shipment, to his own order, of sweet-pickled shoulders, and the invoice forwarded



by him to U, setting the shipment on his account, of 140 tierces of sweet pickled shoulders. When U received the pork it was, apparently, in good condition; it was not until after hours of smoking that its bad quality was developed. At the time of shipment it may have been in good condition for present use, not fit for shipment, or it may have been entirely sound and have deteriorated through neglect on the way. There is no evidence to show that it was not in good condition when shipped. Under these circumstances, had the rule established by this court been observed, the plaintiff could not have been permitted to recover. In an ordinary contract of sale of personal property there is no implication of a warranty of the quality of the article sold. We understand that in England and New York there has been, to some extent, a departure from this rule, but we have not changed in Pennsylvania."

[FOR THE AMERICAN ELEVATOR AND GRAIN TRADE.]

### "SPECIALS."

BY TOLEDO.

The following article appeared in the *Toledo Blade* of June 25:

As there has been some discussion among members of the Produce Exchange relative to special binning of wheat, and the value of certain kinds in different elevators, a gentleman who is not a stranger to the grain trade, gave a *Blade* reporter the annexed opinion relative to the matter:

There is some conflict of opinion at the Produce Exchange as to the reason for the depression in price of No. 2 and No. 3 soft wheat in the Wabash elevators, compared with the same grades in the Lake Shore & Michigan Southern elevators. This difference at one time was as great as four to five cents, and has since fluctuated down to one cent. Just now the Wabash No. 2 soft sells two cents below the Lake Shore.

What is the cause of this difference in prices? The inspection standard is the same at each elevator, and there is not the least show of favoritism in favor of Lake Shore. Some of the dealers claim that the true solution of the difficulty is in the practice of the Wabash Elevator Company, which gives to receivers of wheat the privilege of sorting their consignments, and putting their best wheat into separate or special bins, for their own use and profit, and the wheat of average quality, or bottom of the grade, into the common pile. Of course, it will be seen that the effect of this skimming process must be to lower the general quality of the wheat in the common receptacle or pile. The manager of the Lake Shore elevators will not permit this practice. The No. 2 wheat of high grade and low grade all goes into one bin, and of course the result is that the grade of wheat is kept up to full good quality. When Messrs. Tallmadge and Knight, of the Wabash management, were recently here, the points contained in this article were fully stated to them, and it was then charged as the reason for the depression in value of the Wabash wheat, and as a strong reason why wheat of that kind now goes past Toledo to millers direct. The little advantage to the receivers by sorting the wheat as above is believed to be positively adverse to the general business, not only of our receivers but the elevators.

If this is the true inwardness of the business, it would seem to suggest the policy of a change in methods of the Wabash elevators to correspond with the practice of the Lake Shore.

The conflict in opinion noted at the commencement is indicated by the denial of all the effect of the special bin system, on the part of other members, but this class of reasoners are found to be amongst those who do the sorting of wheat referred to, and that may account for the meat in the cocoanut.

The above article from the *Toledo Blade* presents to my mind a striking analogy between the system of special bins, so justly complained of by those who cannot get them, and the system of protective tariffs. And as there are no doubt a great many of your readers who are firm believers in the system of protection as an institution which confers benefits upon all, but who are at the same time brim full of logical denunciations of the system of special bins, the matter may be of sufficient interest to them to merit space in the columns of the AMERICAN ELEVATOR AND GRAIN TRADE.

An argument becomes interesting when it touches men's pockets. The man who fails to get "specials" in bins, rates, etc., waxes eloquent in his denunciations of the whole pernicious system. He can point out its evils and knows no law by which it can be justified. But no sooner has the tide of his influence borne him into the realm of "specials" than his logic loses its temper and his sense of the injustice of the system vanishes like margins in May.

The "scientific spirit" which weighs all things in the scale of absolute justice and impartiality, is an element which has no part in the schemes of the money-maker. But as it is the right of every individual to make good bargains, we cannot expect that men in their increasing efforts in accumulating money will take time to con-

sider any nice points of justice. But with men and institutions which stand toward the public in the relations of public servants or public property, it is vastly different.

There is apparently a lamentable ignorance on the part of elevator companies and other corporations of their obligations to the public, or else what is still more lamentable, a wilful disregard of those obligations. A public servant may not rightfully use his office in the advancement of the interests of one man above another, much less when the advancement of one man's interests is at the expense of another man's rights. On the other hand, his legitimate function is to prevent men from trespassing upon the rights of others.

Now it is certain that all citizens have some rights in common. If this is true these common rights inhere especially in those institutions which enjoy rights that have been conferred upon them by the state. Therefore, all citizens have common rights in elevators and other institutions, which have been granted certain rights and privileges by the state. As "the state" in its analysis means its citizens, it follows that each citizen has granted to the elevator company, or other corporations, certain rights and privileges for which in turn there must be certain rights and privileges in the thing chartered, which all citizens hold in common. The contrary of this proposition would be an implication that the rights conferred by charter were as much the rights of the thing chartered before the charter as after the charter. But as this is an absurdity—logically at least—it must be admitted that the man who ships a car of wheat to an elevator has certain rights in common with the man who ships five hundred cars. Furthermore, as these rights in common are determined by each citizen's relation to the state, they cannot justly be dispensed to shippers in proportion to the number of cars shipped.

A great many men are of the opinion that if they build an elevator or a railroad with their own money they may dispense favors and privileges as they see fit. This is true only in a measure—because if the above arguments are admitted, and I think they should be, it then follows that the common rights which the shipper of one car enjoys with the shipper of five hundred cars, may not be annulled by any methods or management on the part of the elevator company without violating their obligations to the public, and the essential conditions of their charter.

Now, then, what do we mean by common rights? Simply common justice. And if men do not receive justice at the hands of the state, or at the hands of corporations in which special rights have been vested by the state, then have they been deprived of their common rights, or the rights of citizenship. They have been made in a degree the slaves of others, because other men derive benefits from their labor without rendering them any equivalent, which they are willing to accept as a just payment for the same. Let us see if this is not true in the case of special bins.

In the first place the elevator system makes it necessary that all grain received should be subject to inspection. Secondly, that all grain approximating certain standards of quality should be stored in common. Now suppose B ships in a car of No. 2 Red of an average quality, while A's car of No. 2 Red is the maximum quality and C's car of No. 2 Red the minimum quality of this grade. But because all three cars go into the common stock of No. 2 Red they each receive the same price, which price is determined by the average of the grain. Now suppose Mr. D. ships in three cars of grain, two of which are of the same quality as Mr. C's, while the third is of the same quality as Mr. A's. Now if his two cars are put into the common stock while his one car is put into a special bin, he will succeed in getting a higher price for the latter, while those whose grain has gone into the common stock will receive less than they otherwise would, because the average of the common stock has been lowered.

As a further illustration, suppose ten certain shippers are given the use of special bins while 110 other shippers must submit to have their grain go into the common stock. Now the grain of any ten shippers will average as many cars of extra good wheat as the grain of the certain ten shippers. Take then the grain of the 110 shippers and their extra good wheat raises the average of the grain in the common stock, and with it the quality and price of the inferior qualities which the special bin men have seen fit to work into the common stock. By which plan they gain two profits—one on their inferior wheat and another on the choicer lots—which they have special binned for special purposes.

(There are various other methods for making big profits by the use of special bins, which it is not necessary to mention, as the foregoing is given simply as an illustration.)

Remembering that the relation of the elevator company to each individual shipper is exactly as the relation of the state to the citizen; and also the fact that the profit derived by special bins is nothing less than a tax levied upon the grain in the common stock, and also that the shipper of one car of grain, so far as the elevator company's obligations to the public are concerned, is as justly entitled to a "special" as the shipper of one thousand cars; remembering these facts, the gross injustice of special bins becomes such a glaring imposition upon the grain industry of the country as to afford a very respectable illustration of its prototype—the great national system of specials—the protective tariff.

The man who should essay to justify his claim for a special bin on the plea that the privilege was sought in the interests of those who could not get special bins, would be set down as an egregious blockhead, and nothing short of several blanks would adequately account for the gullibility of those who should credit his assertions. Yet the men who seek the benefits of the protective tariff are not less to be suspected of purely selfish motives than the man who gets the use of special bins. And the analogy between the two cases is just here: In both instances there is something in which all citizens have common rights, because both government and elevators are creatures of the public, and not above it or independent of it. In both cases the validity of these common rights depends on absolute impartiality in the administration of government or the management of elevators. And as common rights mean common justice, the notion that government can dispense aid to all by granting some the use of special taxes is no less preposterous than the presumption that special bins for the few is really an advantage for the many. There can be no more palpable violation of common justice than this—that government may establish some men as authorized sellers of those commodities which other men must buy. To make good bargains is every man's right, and when government interferes and compels men to make poorer bargains than they otherwise would, it certainly deprives men of their common rights, and bestows the same upon its authorized sellers. When the state at the instigation of the men who make pocket knives, prescribes that all citizens who wish to buy pocket knives must buy them of these authorized sellers, it becomes involved in questions which justly concern the individual alone.

A system which enables the few to make better bargains than they could otherwise, and prevents the many from making as good bargains as they could otherwise, is certainly not founded upon just principles. And this is equally true of special bins and special tariffs. If manufacturers who seek a protective tariff can give a man as good a bargain as he can make elsewhere, why do they have recourse to the state to compel him to buy their wares? Is there any sense in enacting laws to compel men to buy as cheaply as they can, and especially when that which they have to buy with has been dearly earned? When we remember that men's interests hopelessly conflict—that what some men gain others must lose—can it be reasonably held that the system of protection which gives freedom to the operations of some and lays corresponding restrictions upon the operations of others, will so equalize bargains that all will receive equal benefits, or even equal justice at the hands of government.

In my opinion, government aid for individuals, classes or corporations, and the assumption on the part of our trickster politicians that this alone is the chief aim of statesmanship, are causes which sooner or later must end in disaster. Government aid has become the prime factor in all great schemes for money making—and money-making schemes are not much encumbered with questions of justice or equity. These are the hobbies of mere theorists, who are forever entangling themselves in questions of right or wrong. The practical man, ignoring these questions, drives ahead, gathering up influence on the way until eventually he is able to wield whole legislative bodies in the interests of his projects. Already we have our moneyed kings and princes who have risen to their thrones by means of the unjust systems of special favors conferred by the state or by its creatures, and as that which is unjust must eventually perish, the continuance of systems of specials of which the protective tariff is chief, can result only in greater disaster in the end.



## General Items.

An unknown insect has been destroying the flax at Adrian, Minn.

It is claimed by the bulls that Minnesota's shortage in wheat will be 14,000,000 bushels.

Missouri's wheat crop is placed at 11,000,000 bushels, a figure which we believe to be too low.

The rice crop of Madagascar has failed, and the people of the interior are on the verge of famine.

Stocks of wheat in Liverpool were reported, July 1, at 5,116,000 bushels, against 2,940,000 bushels April 1.

The inspectors and elevator men say the wheat here is all right, notwithstanding the rumors to the contrary.

It would seem that some of the 15,000,000 bushels of wheat in store here would begin to move toward the seaboard soon.

Chicago now has a regular establishment where ladies can speculate in grain. The establishment is on La Salle street, and is called the Ladies' Grain Parlors.

Receipts of flaxseed at Chicago for past six months were 296,500 bushels, and shipments 483,607 bushels. Receipts for June were 67,000 bushels, and shipments 55,686 bushels.

During the cereal year just ended, there were shipped by sea from San Francisco over 26,500,000 bushels of wheat, of the aggregate value of \$21,500,000, and 1,300,000 barrels of flour, worth \$5,500,000.

The Chicago elevators are too much crowded to handle the new crop, which must soon come in, with any ease. There is considerable movement of wheat out; but it must rapidly increase to reduce supplies suitably.

The New York *Herald* says: "Crop prospects are looking up, and there are faint signs of improvement in commercial circles. Right or wrong, the speculative sentiment in stocks is at this moment quite bullish."

Indiana harvesting reports say the wheat is better than was expected. The quality is of the best—the berry very fine. This is apparently true in every state. The wheat which is left is of superior quality, owing to the survival of the fittest.

The Board of Trade Directors have appointed G. G. Moore to confer with the Statistical Committee of the New York Produce Exchange in regard to arriving at a uniformity of method in computing the visible supply. May success attend the effort.

One prominent operator speaking of the wheat market says: "The trouble is that nine-tenths of the operators are bearish, and whenever they sell short and the market goes against them, they try and influence prices by telling all sorts of stories that seem to emanate from nowhere." But men on the other side accuse the bulls of the same thing.

An exchange says: "There is a current belief among those having a practical knowledge of farming that the crop of the United States may turn out larger than now estimated on account of the fact that a thin stand of wheat is not subject to as much damage from storms as a heavy stand, and receives other benefits in a more or less degree, and is on that account liable to improve as harvest approaches."

The Hessian fly has made great devastation in the wheat fields of various towns in Wayne county, N. Y. In Arcadia the loss is estimated at \$20,000. In the immediate vicinity of Lyons the loss is estimated by careful observers at \$70,000. In some places the farmers are burning the wheat fields in order to exterminate the insect as far as possible.

The reports of shipment from Buffalo, N. Y., for the first half of 1885 show an increased movement of corn and wheat as compared with last year. Despite the low railroad rates, the Erie Canal holds its own in sending this grain to tide water. Of corn, the canal has borne 3,723,241 bushels, as against 2,452,369 bushels for the first six months of 1884. This is an excellent showing for a year when a competition in freight prevails that has borne more heavily on railroads than ever before. The fact indicates that the Erie Canal will long con-

tinue an important factor in reducing the rates of freight from West to East. It is thus a public work of national interest, and there is a reason for the demand that it should be placed under national control.

Says the *Globe-Democrat*: Generally at this season of the year the leading commission men of St. Louis are busy scraping around for old and new sacks to send to country customers and producers, in which to ship their wheat, but this year orders for sacks have been the exception, and signs "sacks for sale" will soon be in order. The commission men say the natural inference is that the farmers have not got the wheat to ship, or are holding it to await the development of the market before they call for packages to move it in. The general leaning in opinion is toward the first inference, however.

The London *Miller*, speaking of the present and future situation in wheat, says that it is certainly a common belief that 20,000,000 to 25,000,000 quarters less of wheat will be grown in 1885 than was obtained by European and American harvests in 1884. This belief is a real support to many holders of wheat, and they, on their part, take confidence and wait—as much as they can. Those who cannot wait have to accept terms almost as low as marked the close of November. However, the outlook, very discouraging in the immediate future, is fairly clear at a distance, and the fall in prices common at harvest time is no longer feared by stockholders.

It is charged by dealers in New York City that one reason for the shrinkage in the foreign grain trade is that the quality of New York wheat has deteriorated under the mixing process. The grain committee of the Produce Exchange, it is said, accept as good delivery a mixture of No. 2 winter red, which is the standard, with inferior qualities, and English traders are greatly dissatisfied with this rule for grading and inspecting grain. In dull times any excuse for an uncertain market is expected, but there may be more truth in the charges against the "mixers" than they are willing to admit.

It is not safe to despise New England for any matter. One bushel more per acre on her sterile soil, than where the soil has simply to be tickled in order to produce abundantly, is surely several points in her favor. With all her agricultural disadvantages, she beats those very states that make corn a specialty. Her average production per acre for the past five years is 30.8-10, with an annual production of 8,000,000 bushels. The average per acre of the Missouri Valley during the same time is 29.8; that of the Middle states, 29.4; the Ohio Valley, 26 bushels, and the Gulf states only 13.9 bushels. The average acreage during this time in the Missouri Valley is 19,500,000 acres; the Ohio Valley, 18,000,000; the Gulf states, 10,500,000; the Middle states, 2,700,000, while that of New England is only 252,000 acres.

## NEW ELEVATORS IN THE NORTH-WEST.

The elevator mania has seized the wheat men. During the summer the Northwestern Elevator Co. will rebuild the elevator burned at Crookston, Minn., and will put up six more houses along the Manitoba Road, all of 30,000 bushels' capacity. Cargill & Bagley are about to open an elevator in Minneapolis, and in addition to the elevator system now controlled by them will erect ten, and Bassett & Huntington eight new 30,000-bushel houses along the Hastings & Dakota Road. H. W. Pratt & Co. will also build eight or ten new elevators on the Hastings & Dakota Road, including one each at Webster, Bristol, Groton, Bath, Aberdeen, Warner, and Malette, all of 30,000 bushels' capacity. Work on the Minneapolis & Northwestern elevator at Ada will commence this week, the lumber being nearly all on the ground. Besides all these there are two new elevators now being built at Duluth, with a capacity of nearly 3,000,000 bushels; the additional elevator to be built by the Canadian Pacific at Fort William, capacity 1,000,000 bushels; and the fifteen to eighteen elevators to be put up by A. J. Sawyer on the main line of the Northern Pacific and the Jamestown and Northern. If elevators were paying property and the late legislature had not passed a law placing great hardships upon their management, some capitalists might be induced to build a few in Minnesota or Dakota this season.—*St. Cloud Journal-Press*.

The best and cheapest Car Starter is sold by Borden, Selleck & Co., Chicago, Ill. With it one man can move a loaded car.

## Fires, Casualties, Etc.

C. C. Green, grain and flour dealer, of Hampton Falls, N. H., died recently.

W. T. Sagehorn, hay and grain dealer, of Oakland, Cal., was burned out recently.

The grain elevator of Hunt & Kessinger, at Whitehall, Ill., has been destroyed by fire.

The elevator of O. B. Moore & Co., at Lamar, Mo., was burned recently. It was insured.

T. N. Hergle's warehouse, at Woodhull, Ill., was burned on July 4. The loss was about \$10,000.

During the great fire at Stoughton, Wis., on July 5, twenty cars loaded with wheat were burned.

Ira Clark, a 13-year old son of Harris Clark, grain dealer at Edinburg, Ind., was lately drowned.

E. J. Walden, a well-known grain man of Anderson, Ind., killed himself recently by taking morphine.

The elevator at Lawndale, Ill., owned by Eten & Randolph, was burned June 21. Loss, \$5,000. The cause of the fire was unknown.

On the morning of July 4 the warehouse of A. A. Taylor, and several other buildings, at Loudonville, Ohio, were burned. The loss was \$15,000.

The grain warehouse of Shoemaker & Co., at Pittsburgh, Pa., was destroyed by fire June 16, involving a loss of \$20,000, which was fully insured.

The grain elevator, sheds, stables, and office owned by H. S. Carpenter and used by M. Truby & Son, at Joliet, Ill., were burned on the night of July 4. The loss was \$5,000; insured.

The elevator of the Knoxville City Mill Co., Knoxville, Tenn., was destroyed by fire June 13, together with 10,000 bushels of grain. The loss was about \$15,000. The grain was all insured.

Hanford's elevator and 3,000 bushels of grain at Red-dick, near Kankakee, Ill., burned Sunday morning July 12. The loss was \$6,000, on which there was but little insurance. The fire is attributed to incendiarism.

Charles Spaulding, Mansor Bard and Charles McAtee, colored, were killed by the explosion of a boiler in the Mattingly-Moore distillery, at Bardstown, Ky.; Bemis Allen was fatally injured, and the building was wrecked.

A man named John Mehigan, a scooper at the Erie elevator, Buffalo, N. Y., while loading cars one day recently, was struck by one of the spouts. He received a severe fracture of the nasal bone and several bruises about the face.

Gus Haffner, of Donnellson, Iowa, a boy, was suffocated in an elevator chute, July 14. The boy was playing in a bin containing 400 bushels of shelled corn, and the elevator men began loading cars from the bin unaware that the boy was in it.

At Oconomowoc, Wis., June 21, fire broke out in Rosholt's elevator and quickly spread to adjoining buildings. The elevator and warehouse, Kellogg's warehouse, Gellack's store building, and several barns and their contents, were destroyed. The estimated total loss is \$14,000; insurance about \$10,000.

A building at Lacon, Ill., known as the "Eagle Mills," owned by Jesse Drake, and used as an elevator and malt house, has been destroyed by fire. There was \$2,500 insurance on the building, which was valued at \$15,000. Three car loads of malt and 6,000 bushels of grain, on which there was no insurance, were also destroyed.

A serious accident happened June 21 to Ernest Crowell, at the Washburn elevator, under construction at Anoka, Minn. He fell forty-four feet to the bottom of a bin. The only bones broken were one wrist; the principal injury being to the back. His body will be paralyzed from the hips down. He is twenty-one years of age.

While Amos Smith was attending a feed mill on the farm of H. W. Hastings, near Owatonna, Minn., a pin became detached and the balance wheel ran at a fearful rate, bursting. A piece twelve inches long struck Smith on the hip, tearing the flesh off the bone and making a horrible flesh wound. The missile then passed through four inches of pine, the thickness of the granary, then through a two-inch plank, cutting a hardwood post in two, going ten rods and burying itself in the side of a knoll. The physician says the man will live if gangrene does not set in.

A very sad accident happened July 7 at the works of the Williams & Orton Mfg. Co., at Sterling, Ill., in which Chas. Loring, a boy ten years of age, and son of the watchman, met his death. He and another boy of about the same age, Dick Cochrane by name, were playing on the second floor. Cochrane stepped on the elevator, telling Loring to follow him, which the latter refused to do. Cochrane then started the elevator, and after it had ascended a few feet Loring made a spring and caught hold of the floor of the elevator. He failed to retain his hold and fell to the first floor, striking on his head, breaking his skull and otherwise terribly injuring himself. He died in a few hours. The Williams & Orton Co. suspended business so that their men could attend the funeral of the boy.



## ELEVATOR AND GRAIN NEWS

Parties at Fort Collins, Col., contemplate building an elevator at that place.

McAleer Bros. & Co. succeed James S. McAleer, grain dealer at Unadilla, Neb.

Dickey & Son succeed E. Dickey, grain commission merchant, at Waco, Tex.

The Lenham Elevator Co. will build a 75,000-bushel elevator at Valley City, Minn.

Fox, McElvain & Finch, grain and stock dealers, of Brainard, Neb., have dissolved.

During the month of May Cannon Falls, Minn., marketed 147,000 bushels of wheat.

A. Bernatz & Bro. have just completed a 10,000-bushel elevator at Fort Atkinson, Iowa.

A grain warehouse, to hold 60,000 bushels, is in course of erection at Colfax, Wash. Ter.

G. D. Stewart, of Pittsburg, Pa., is making improvements in his elevator at that place.

John A. C. Wightman, grain dealer, of Woonsocket, R. I., has sold out to A. B. Capron.

The two new elevators at Duluth, Minn., F and G, will be ready for use by September.

A new elevator is to be built at Aberdeen, Dak., and the present elevator is to be enlarged.

R. Y. Berry & Co., millers and grain dealers, of Versailles, Ky., have made an assignment.

The Omaha Union Elevator Co., will build a 30,000-bushel elevator at Marysville, Kan., this summer.

The Ansonia Flour and Grain Co. has been incorporated at Ansonia, Conn., with a capital stock of \$15,000.

S. Blum & Co., grain commission merchants, of Chico, Cal., have been succeeded by Blum, Baldwin & Girwin.

The Baltimore Elevator Co., Baltimore, Md., are having one of their elevators overhauled and new machinery put in.

Mr. O. Wheeler, of Winona, Minn., will remove to St. Paul next month to engage in the grain commission business.

The Knoxville City Mills Co., Knoxville, Tenn., whose elevator was recently burned, will rebuild in September.

Lower & Wood, grain and produce dealers at Alliance, Ohio, have made an assignment with liabilities placed at \$16,000.

The new Merchants' Elevator, at St. Louis, raised steam for the first time on July 8, and everything started off satisfactorily.

The elevator at Joliet, Ill., has been sold at a forced sale for \$59,000. W. A. Strong, one of the stockholders, was the purchaser.

A. J. Merriam, bucket shop man of St. Louis, doing business under the name of Warner & Co., disappeared from that city on July 1.

Cargill & Bagley are building an elevator at South Minneapolis, Minn., to cost \$25,000. It will have a capacity of 100,000 bushels.

Eight new elevators, of 30,000 bushels' capacity each, will be built this summer by Bassett & Huntington along the Hastings & Dakota Railroad.

Those who recently "spread" wheat between Chicago and St. Louis at seven cents difference, have already a profit of 4 cents a bushel in their venture.

M. D. Rinehart, of Terre Haute, Ind., has furnished the Goodlander Mill Co. one of his double steam shovels for use in their elevator at Fort Scott, Kan.

The Gregg Bros. Grain Co., of St. Joe, Mo., are putting in one of the Giant Dustless Grain Separators of Dickey & Pease, Racine, Wis., manufacture.

C. W. Lord, of Delphos, Kan., is putting into his elevator one of the larger sizes of the Dustless Grain Separators, made by Dickey & Pease, Racine, Wis.

The salary of the assistant secretary of the Chicago Board of Trade has been fixed at \$2,000 per annum, but no one has been appointed to fill the place.

The Minneapolis (Minn.) Union Elevator is rapidly approaching completion. A force of 400 men are employed, and the capacity will be 1,700,000 bushels.

The North Star Elevator Co. has been incorporated at Minneapolis, Minn., by J. W. Johnson, W. W. Yerxa, and G. B. Kirkbride. The capital stock is \$200,000.

J. W. Planalp, of Storm Lake, Iowa., is putting into his elevator one of the Flax Mills (cleaners and separators), manufactured by Dickey & Pease, Racine, Wis.

H. E. Watson, New Haven, Mich., is building an 8,000-bushel elevator after a new idea perfected by the architects, Nurdyke & Marmon Co., Indianapolis, Ind.

The Hamilton, Ont., Board of Trade appointed a committee July 2 to press upon the Dominion Government the matter of abolishing tolls on the Burlington Canal

and making Hamilton a free port. The matter is at present under consideration of the Government, who will likely accede to the demand of the Board.

The Crowell Lumber and Grain Co., of Blair, Neb., are putting in the third one of the Giant Dustless Grain Separators, manufactured by Dickey & Pease, of Racine, Wis.

J. H. Hiland, arbitrator of the Railroad Passenger Association at Chicago, has resigned that position to accept the position of agent of the Minneapolis Millers' Association.

The Montreal (Canada) *Gazette* says that there are six bucket-shops in full operation in that city. They deal in Chicago grain and provisions, and New York stocks and grain.

Levering & McAtee, grain commission merchants of Baltimore, Md., have dissolved. S. H. Levering continues as S. H. Levering & Co., and W. B. McAtee as W. B. McAtee & Co.

Payne & Wilson, of Marcus, Iowa, have recently placed in their elevator one of the Giant Dustless Separators, made at Racine, Wis., by the great fanning mill firm of Dickey & Pease.

New elevators are to be built all along the C. M. & St. P. from Granite Falls to Mitchell, Dak. Lumber has already been shipped to many of the points, and work is to begin at once.

A 5,000-bushel grain elevator, using a windmill as motive power, is being erected at Windom, Kan., for Fred P. Holt, after plans prepared by Nurdyke & Marmon Co., of Indianapolis, Ind.

A. J. Sawyer, of Duluth, Minn., contemplates building eighteen elevators this season. They will be located at points along the Northern Pacific Railroad and the Jamestown & Northern Branch.

W. D. Rinehart, of Terre Haute, Ind., has furnished to the Burns & Collett Fire Brick Works, of Montezuma, Ind., one of his patent Hercules Crushers, for reducing bats and clay for high grade fire brick.

The Northwestern Elevator Co. are about to rebuild the elevator recently burned at Crookston, Minn. They will also build, this summer, six elevators, each with a capacity of 30,000 bushels, on the Manitoba Road.

Edward Sanderson & Co., of Milwaukee, Wis., are about to build a large elevator in that city, near the "Phoenix Mill," the ground dimensions of which will be 78x250 feet, and its capacity 500,000 bushels.

An Evansville, Ind., man writes that a certain farmer in his section, who commenced plowing up his land, but was stopped by rains, is now threshing out the same wheat with a yield of thirty bushels to the acre.

F. Manson, of Holstein, F. A. Winchell, of Kingsley, and R. R. Whitney, of Aurelia, all in Iowa, are putting into their warehouses the large size Giant Flax Cleaners, manufactured by Dickey & Pease, of Racine, Wis.

An elevator of large capacity, designed to handle wheat, corn and coal, is under erection at Media, Pa., for Haines & Williams. The plans and machinery are being furnished by Nurdyke & Marmon Co., of Indianapolis, Ind.

The L. T. Soule Elevator Co. has been incorporated at Minneapolis, Minn., for the purpose of building elevators. The capital stock is \$50,000, and the officers are Wm. Wheeler, L. T. Soule, O. P. Carter, and C. F. Wheel-r, all of Minneapolis.

La Moure, Dak., expects to market 750,000 bushels of wheat this season. The Northern Pacific Elevator, at that place, has been enlarged to a capacity of 80,000 bushels; Yerxa & Kirkbride, of Minneapolis, Minn., have an elevator in course of erection; and A. J. Sawyer, of Duluth, Minn., has secured a site on which to build one in time for the coming crop.

The Portland *Oregonian* states that the cost of shipping a ton of wheat to Liverpool via Cape Horn is \$14, of which the Oregon Railway & Navigation Company takes \$6 as its share. The average cost of shipment from Duluth to Liverpool via Montreal is \$5.60; this, added to the Northern Pacific rate of \$8 to Duluth makes a total charge of \$13.61 per ton from the point of production to market, or a difference of 39 cents per ton in favor of trans-continental shipments. On the same authority it is stated that the Northern Pacific would, if necessary, make a still lower rate on the Eastward traffic.

Reports as to the efficiency of the recently passed Dakota grain law are conflicting. Superintendent Odell, of the Northern Pacific, states that little advantage had been taken of it by the farmers. Donald McFadden, of Valley City, it is said, has been guaranteed an advance of six cents by a Minneapolis dealer on wheat shipped in cars furnished on the side track at that point under the new law. Small clubs of farmers are said to be forming in various parts of the country, and when a member desires to fill a car for shipment the whole club assist him with teams in hauling to the station, in order to fill the car in the required 24 hours. If this practice results generally from a knowledge of the new law the elevator buyers at small stations will withdraw.

Says the Port Huron *Times*: Contractors are preparing proposals for the new elevator to be built this season on St. Clair River, east of McMorran & Co.'s flouring mill and north of the slip. The main building will be 100x50 feet and 64 feet high, with a tower about 42 feet high. It will be a frame structure, inclosed with iron, and will be covered with a shingle roof protected by fire-proof paint. The building will stand on 66 stone piers, and will be very substantial. It will contain 50 bins for storing grain, beside large receiving bins.

There will be a marine leg on the river side for unloading vessels, and a railroad track will be laid on the west side between the elevator and mill so that cars can be run to the elevator. The engine and boiler house will be located on the north side, and will be supplied with a 75-horse power engine and steel boiler from the Phoenix Iron Works. The elevator will have the latest improvements, and when finished will be one of the most complete elevators in the West.

Chas. Kaestner & Co., of Chicago, Ill., have recently shipped their Portable Mills to the following parties: Standard Cement Co., Akron, N. Y., three 30-inch mills; Davis & Rankin, Chicago, Ill., one 20-inch mill; U. Cummings, Buffalo, N. Y., two 30-inch mills; L. M. Rumsey Mfg. Co., St. Louis, Mo., one 24-inch mill; Eickenberry & Co., Chariton, Iowa, one 30-inch mill; Henry Foster, Clifton Springs, N. Y., one 20-inch mill; J. A. Eggleston, Ripon, Wis., one 24-inch mill; E. F. Brownell, Rochelle, Ill., one 16-inch mill; J. G. Evans, Ayr, Neb., one 16-inch mill; Delmer Wuerpel Mill Building Co., St. Louis, Mo., one 20-inch mill; B. Allbaugh, Lyndon, Kan., one 16-inch mill; Schofield & Taylor, Waverly, Neb., one 16-inch mill.

The St. Louis *Globe-Democrat* of July 8, speaking of the new Merchants' Elevator, says: "The executive committee of the Board of Grain Inspectors yesterday examined the new Merchants' Elevator, and reported on it in very complimentary terms. Capt. Slattery says the work will be finished and the elevator handed over to him so as to receive cars on Saturday and issue warehouse receipts on Monday. He has very thoroughly canvassed the situation, and says that a great deal more grain will be brought here than any one has any idea of, that the St. Louis market will draw from many new sources, and that enough will be received to keep all of the elevators busy. Another 100 feet of piling is to be driven at the Merchants', and the capacity will be made 700,000 bushels net."

The St. Louis *Globe-Democrat* of July 11 says: "The Merchants' Elevator Company yesterday arranged to have plans drawn for a new elevator, to be constructed on the Missouri Pacific track at Twenty-second street, where the company has a lot of land 343 by about 200 feet. The proposed elevator will cost about \$50,000, will be ironclad, on the same plan as the Merchants', and will have a net capacity of 350,000 bushels. The stock is all subscribed, and work will be begun as soon as the Merchants' is finished, the expectation being that the second new elevator will be ready to receive the new corn crop. Capt. Slattery said yesterday that he had received assurances from several competing points, and from a great many dealers and producers who have shipped but little to this market, that they will do all their business here. He says the prospect could not be better for increasing the importance of this market."

At a special term of the District Court held at Red Wing, Minn., Judge Crosby made an order that the elevators and warehouses belonging to the Minnesota Elevator Company be sold at auction at the Court House in Red Wing on the 28th day of July. The elevators on the Midland Road will be sold in one group, and no bid will be accepted for them less than \$20,000. Those on the River Division will constitute a group with a like minimum bid, and the Wisconsin elevators will be sold in separate parcels. Judge Wilder, the assignee, thinks that at least \$50,000 will be realized by the sale, and expects to pay about 40 per cent. of the debt of the company. The leading creditors were represented by Gen. Sanborn, John M. Gilman, and C. D. O'Brien, of St. Paul, and Wilson & Bowers, of Winona, and from statements made by them it appears that the creditors propose to form a syndicate and buy in the property; they are liable, however, to pay full value if they do, and then may find that they have strong competitors for the business. In this connection, the *Wabasha Herald* says, it is suggestive of business that H. J. O'Neill, the present lessee of the elevators, has secured a lease for a term of years for the Wabasha elevator, without which those along the Midland can hardly be managed conveniently or profitably.—*Winona Republican*.

A dispatch to the daily press says: If the Ellendale Branch of the St. Paul Road goes to St. George, as is now promised, it will undoubtedly continue to Bismarck either this season or next. But what is popularly termed the Northern Pacific country is reached fifteen or twenty miles north of Ellendale, so that the music will strike up the moment the St. Paul company begins the extension from the latter village. St. George is a great wheat center, and there was a spirited rivalry for the produce of that region last season between the grain buyers on the two lines, the haul to La Moure being about the same as to Ellendale. The St. George people claim that the Northern Pacific Company has broken faith with them in failing to extend the line from La Moure last fall, so as to furnish them transportation facilities. Another consideration of general interest is that the extension of one Chicago line into the Northern Pacific country in the direction of Bismarck will lead other Northwestern roads to seek a foothold in this part of the territory. An agreement has existed for two or three years preventing the Northern Pacific from building south of Milnor and La Moure and the southern roads from invading the northern territory. This contract was virtually broken, though not literally, by the opening of the Fargo Southern under the guardianship of the St. Paul Company. Lively times may be expected in railway circles and town site enterprises when two or three of the big Northern corporations get to fighting for the business of the Upper James and Missouri River Valleys.



## Canals and Marine.

An order in council was issued at Ottawa on June 20, reducing canal tolls on grain via the St. Lawrence route from ten cents to two cents per ton, the minimum charge under the law.

Wm. Thomas, for twenty years superintendent of the Illinois & Michigan Canal, has been displaced by the Canal Board and Capt. Latham promoted to his place. No reason was assigned for the change except that it is intimated that the Board intends adopting some new policy to which Mr. Thomas was supposed to be antagonistic.

The Manchester Ship Canal Bill, on which a fortune has already been spent in Parliamentary proceedings, is once more before the British House of Commons. Two years ago, after the House of Commons had passed the bill, the Lords threw it out. Last session the Lords passed it, and the Commons rejected it. This year the Lords have again signified their approval, and the promoters are again sanguine.

At Kingston, where the lake vessels tranship for the river and canal service, no elevators have been provided and storage is deficient; a vessel has sometimes to wait several days for a chance to unload. If Buffalo had neglected its opportunities in a like manner it would not have been what it is to-day, and the traffic on the Erie Canal would have been vastly less than it is from the sheer impossibility of handling it. Not only are the river freights high, but the wharfage charges at Montreal are far in excess of those at New York, Boston, Portland, Philadelphia, or Baltimore. This shows that the forwarders have not yet done all, or nearly all, they can do to make the St. Lawrence route a success.

The circular recently issued by the secretary of the Treasury announcing the abrogation of the treaty of Washington is causing considerable commotion in lake shipping circles, as, according to the interpretation of the circular, the Georgian Bay route is now practically closed to the Chicago grain fleet. During the last few years an immense volume of traffic has been carried on between Chicago and Georgian Bay ports, nearly all of the medium-size vessels of standard rating having been employed in carrying grain from Chicago to Midland and Collingwood, their cargoes being elevated at those ports and shipped over the Grand Trunk Railroad to New England. If this route is to be summarily closed up it will prove a severe blow to the shipping interests of the lakes. At present the lake marine is staggering under a heavy load of financial depression, and any additional burdens are liable to prove fatal.

A vessel which takes a cargo from Europe to New York can afford to take a cargo of grain back on lower terms than a vessel that goes to Montreal in ballast. To a great extent the export trade must be measured by the import trade, and to the limitations of the import trade of Canada is due in a large measure the limited export grain trade of the St. Lawrence. Because Canada has in the St. Lawrence a noble river of which the navigation is but little interrupted by rapids, which are got over by means of canals of large capacity, it does not follow that she can take the export trade of the grain of the West from New York and other American Atlantic cities. The belief that she would be able to do so was an illusion which scarcely now exerts its influence even in the city of Montreal. Canada has spent \$45,000,000 on canal, a secondary but important object of which was to attract the trade of the Western states; the coveted prize has eluded her grasp, and as time goes on it recedes more than ever from view.

Since the New York canals were freed from tolls but little care has been taken to maintain their efficiency; in fact, it is notorious that something like systematic neglect has characterized the management. This was predicted by the opponents of the measure that resulted in abrogating the tax imposed on tonnage. They alleged that railway influences would be exerted to lessen usefulness of the canals, and that a tax upon the people to maintain them would be wasteful appropriation of money, for it would not be well applied. Nevertheless, the people voted by a large majority to make the canals free. It is evident now that one of two things must occur within a few years. First, the canals must be maintained to the highest degree of efficiency, and there must also be improvement to increase capacity by lengthening locks, or such other means as will permit full use with least outlay of money and of labor. Second, in default of this wise care the canals will become useless, or nearly useless, and there will be popular demand for their abandonment.

More than twenty years ago Canada tried the experiment of freeing the St. Lawrence canals from tolls, and in 1863 the Minister of Public Works reported the result. "It cannot be assumed," he said, "that the abolition of tolls on the provincial canals has diverted any business from the Erie Canal. On the contrary, it has continued to increase on that canal in a very remarkable manner, but has actually fallen off on the St. Lawrence, where, from the trade being more especially Canadian, a different result would have been produced if exemption from tolls could have any influence in diverting the

American trade into the same channel." This result was obtained after three years of trial. The Erie Canal, on which the tolls remained, increased its traffic, while the Canadian canals, from which the tolls were removed, suffered a decline of traffic, showing that the course of the traffic depended upon other causes than the existence or non-existence of tolls. The explanation is that the public did not gain materially by the abolition of tolls; the gain was made by the forwarders, who at once advanced their rates. Before the tolls were removed the average freight rates from Lake Ontario ports to Montreal was \$1.81 per ton; in 1860, when the tolls were removed, the freight rate was advanced to \$2.80, which, taking the toll into account, was an advance of \$1.43 per ton.

Let us consider very briefly what part is played by the Erie Canal in the movement of freight. We do not propose to give figures, nevertheless it may be well to bear in mind that during the season of navigation last year more freight was transported over the Erie Canal and Hudson River to New York than by all the railways that have their entrepot at that city. And still another fact, that at this moment grain is carried by water from Chicago over the lakes to Buffalo, thence by canal to the Hudson River and to New York at six cents a bushel for wheat, less for corn, and still less for oats. The lowest rate by rail is never less than nine cents a bushel for wheat from Chicago to New York. The difference is a matter of material importance to Western farmers, and not less to millions of buyers in the New England states and New York, to whom cheap food is a necessity to cheap production of the various goods and wares that are bought and used by farmers. The canal, in conjunction with the lakes, is a regulator of freight rates. It is always possible to transport heavy freights by water cheaper than by any other means, especially when there is no need of haste in delivery. Figures may be adduced to prove that savings effected in railway freights through reduction rendered necessary by the operation of water routes are many times greater annually than the tax required to maintain the Erie Canal in the highest degree of efficiency.—*Husbandman.*

## THE "VISIBLE SUPPLY."

One of the most interesting of the commercial statements that are regularly furnished to the grain trade is that of the visible supply, being the quantities of grain that are in store at the principal points of accumulation in the United States and Canada, and in transit between those points. We might say "two" of the most interesting, because it is the duplecity of the matter that largely makes it talked about. The Secretary of the Chicago Board of Trade and the statistician of the New York Produce Exchange, each of them compile such a statement for publication Tuesday of each week, and the figures are compared, more or less closely, by many hundreds of men in the grain business.

It is pretty well known that in regard to the quantities actually in store there is seldom any very large disagreement. Sometimes the New York man, in his anxiety to "be out early," estimates the quantities in store in Chicago without waiting for the official figures furnished by the Registrar here, and the guess is not always a close one. But where large quantities are involved, as in the case of the more than 40,000,000 bushels of wheat that now constitute the visible supply, a few thousand bushels more or less is a very small percentage of the whole. The great cause of disagreement between the two statements is in the estimates of allowance to be made for the quantities in transit by water and rail. Last week the Chicago statistician dropped out of the reckoning some 900,000 bushels of wheat that had been shipped by water and not reported as having arrived anywhere within the limit of time set for the average passage. The other statistician did not eliminate this quantity from his totals, and the consequence was a wide difference between the results, one showing that the visible supply of wheat decreased nearly 400,000 bushels during last week while the other made it to have increased nearly 6,000 bushels. Of course the question whether our stocks are growing or diminishing, so near the time of harvest, is an important one in determining whether prices are likely to advance or recede, and the matter thus becomes one of direct appeal to the pocket. The men who wanted to see prices go up were naturally in favor of the statement that the supply is on the decrease, and vice versa; and the trade is now divided into two parties who, like the Big-endians and the Little-endians in the Kingdom of Lilliput, are hopelessly opposed in their views of the matter.

One would think that the men who are acute enough to speculate in grain with any show of success would be able to see that the two statements are made up on plans which are different, and average the two if they can not make up their minds to accept one or the other as authoritative. As, however, they seem not to be able to do this, it might be as well for them to bring about a conference between representative men of both boards with a view to the adoption of some common plan for the compilation. In that case there would be uniformity of method and differences in result would then be chargeable to errors of interpretation of the rules, if not to mistakes in figuring. Some of our best-posted operators appear to be in favor of some such attempt to abolish the difficulty, while others claim that it is best as it is, or that it would perhaps be better still to drop out of consideration the quantities in transit and regard only the aggregate of stocks in store.—*The Tribune.*

## NOTES FROM THE EXCHANGES

Membership tickets of the New York Produce Exchange have been selling at \$2,500.

Within six months the Kansas City Board of Trade will commence the erection of a \$300,000 building.

Says the Cincinnati *Price Current*: "The Cincinnati Chamber of Commerce has established a new grade of corn in this market, which is to be known as No. 2 white-mixed. So much of the corn received here this season has been so nearly white that in justice to shippers it could hardly be classed as mixed, and yet the rules of inspection left no alternative but that or a new grade. The requirement of this grade is the same as for No. 2 white, except that it may contain one-tenth of its volume of yellow or red grains, or one-tenth of both."

At the annual meeting of the Richmond, Va., Cotton and Grain Exchange the following officers were elected: President, Captain Philip Hazall; First Vice-President, John P. Branch; Second Vice-President, P. A. Sublett; Board of Directors: H. B. Taliaferro, Charles L. Todd, C. H. Simpson, Norville Ryland, Leopold Levy, W. R. Johnston, W. A. James, W. C. Ervin, T. H. Ellett, R. A. Dunlop, Wm. M. Coulling, W. G. Clemons, W. S. Archer, Otway S. Allen and John Addison. At a subsequent meeting B. A. Jacob, Esq., was re-elected Secretary; W. P. Smith, Esq., was re-elected Treasurer. Mr. H. D. Riddick is the grain inspector of this Exchange, and was elected to that position on the 1st of May last.

The difficulty between the Boards of Trade of Chicago and Louisville has been satisfactorily adjusted, and Louisville now receives the quotations of the Chicago Board. The quotations were cut off from the Louisville Board early in June because it was found that they were being furnished by members of the board to nearly all the bucket-shops in the South. Mr. J. M. Ball, Chairman of the Market Committee of the Chicago Board of Trade, strongly advised the Louisville people to adopt a by-law prohibiting members, on pain of expulsion from furnishing quotations to outsiders. The Louisville Board declined to take the hint at the time, and their quotations were consequently cut off. Since then they have taken a wiser view of the case and adopted the necessary by-laws.

Quite a commotion was created on the St. Louis Exchange July 2 by the publication of an order from the executive committee, directed to the Board of Grain Inspectors, instructing that hereafter no marks be placed on wheat to show whether it is new or old; that if wheat grades No. 2 it be so marked, without any certificate to show anything else. The millers were very much stirred up over the order, and several of them publicly declared against it, calling it an order "in the interest of the pit," etc. The order was issued after a consultation between Messrs. S. W. Cobb and J. C. Ewald, of the executive committee, and the elevator men later agreed with those gentlemen to keep old and new wheat separate, and to deliver old wheat when it is called for by certificate, and new wheat in like manner. The caller on 'Change has been instructed to call old and new, and certificates of purchase will show whether the miller has purchased old or new wheat. This agreement on the part of the elevator men will probably make the ruling more satisfactory, but several of the opponents of the rule say it will be carried to the board of directors for a decision. The executive committee say their action is final.

The New York Produce Exchange has been struck with a fit of economy: The recently-elected board of managers has received many intimations, anonymous and otherwise, that a judicious pruning of the salary-list will be acceptable to the rank and file of the Exchange. The first head to fall is that of S. M. Ayers, the custodian of the building, who receives \$2,000 a year. He has been informed that his services will not be required after Sept. 1. Many of the influential members of the Exchange are grumbling because of the heavy expenses, and some of them claim that there are a dozen sinecures which ought to be lopped off. The grain and the flour inspection departments are special objects of attack. Each of these departments has a large corps of clerks, and last year \$3,000 or \$4,000 were lost in small sums, it is claimed, by loose handling of money. Conservative members desire that those separate departments be consolidated and all the work should be attended to at the general office. They think there ought to be but one cashier to handle the money. A proposition to do away with one of the paid officers on the floor of the Exchange is under discussion. The flour superintendent receives a salary of \$1,200 a year and the detective gets \$800. The practicability of combining the two positions with one salary has been suggested.

Dickey & Pease, Racine, Wis., one of the largest fanning mill and grain separator manufacturers in the United States, have just shipped to South America thirty of their large Warehouse Fanning Mills, eighteen of their large size Flaxseed Cleaners and several of their well-known Giant Dustless Separators. This order was the result of sample machines having been sent there some six months ago on trial.



# THE AMERICAN ELEVATOR AND GRAIN TRADE.

Published on the Fifteenth of each Month by  
**MITCHELL BROS. COMPANY.**  
(INCORPORATED.)

OFFICE: Howland Block, 184 and 186 Dearborn St., Chicago, Ill.

Subscription Price, : : : \$1.00 per Year  
English and Foreign Subscriptions, 1.50 "

English and Foreign Subscriptions may be sent to W. H. Smith & Son, 186 Strand, London, W. C., Eng.

A. J. MITCHELL, - - - Business Manager  
HARLEY B. MITCHELL, - - - Editor.

Vol. IV. CHICAGO, ILL., JULY 15, 1885. No. 1.

## ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

## CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

## THE FOURTH VOLUME.

With this number the AMERICAN ELEVATOR AND GRAIN TRADE commences its fourth year. It has been the aim of the management to make each issue an improvement on its predecessor; and how far this aim has resulted in accomplishment, the reader can best judge. If, however, success is to be measured by appreciation on the part of readers, we have little to complain of. Our subscription list has constantly increased from the date of the first issue; and the patronage of advertisers has increased in the same measure, until now nearly every firm making a specialty of the elevator trade is represented in our columns. Even through the dull times the paper has steadily grown, proving, beyond a doubt, that the field we occupy will sustain a publication of character devoted to its interests.

The present issue will be found more than usually interesting, largely from the discussion of current topics by our readers. This feature we wish to become more and more prominent. We desire readers to use our columns freely for the discussion of whatever is of interest to the trade. It is the hearty co-operation of readers in the past that has constantly encouraged us to move onward; and it is to this co-operation that is due the growth of the paper, its improved appearance, and more interesting contents. With a continuance of this generous appreciation we can safely promise that Volume Four will far surpass its predecessors in correctly representing the great grain interests of the country.

## TAXING SPECULATIVE DEALINGS.

The proposition has been made in a number of state legislatures to tax speculative dealings, notably in New York state, where the members of the exchanges are credited with the parentage of the bill. Their purpose was a double one—both to discourage the bucket shops and at the same time legalize such deals.

So far as we know the experiment has never been tried in this country, and so we have nothing in the way of American experience to instruct us as to the feasibility of such a scheme; but Germany has had a law in force for four years known as the Exchange Tax Bill, which is now about to be supplanted by another measure of the same kind, which goes into operation on Oct. 1 of the present year. The present law requires a stamp of about five cents on each transaction in stocks, bonds, etc., and twenty-five cents when such transactions are completed. The law was designed not to check speculation, but to increase

the Imperial revenues, and is confessedly a failure in that respect, while on the other hand it has been productive of legal complications that have tried the legal lore of the bench and bar.

The law which goes into effect on Oct. 1 is the result of a compromise between the views of Bismarck and those of the dominant faction in the Reichstag, is a pro rata tax, of two-tenths per thousand on the value of the transaction, with graduations of 2,000 marks (about \$500); when the transactions reach 10,000 marks the graduations are of 10,000 marks. The results of this law, thus far discernible, are that many brokers announce that they will give up business on October 1. It is questionable whether the taxation of floating capital in process of realization is either just or feasible. For ourselves, we fail to see the equitable basis for taxation in such cases.

## THE NEW CUSTOMS REGULATIONS AND THE GRAIN TRADE.

For a long time marine circles have not been agitated as they were over the promulgation of Secretary Manning's circular on July 7, respecting the new customs regulations. The gist of the circular was that "hereafter all shipments of merchandise between points in United States territory by way of Canadian waters or railways will be regarded as ordinary importations from foreign contiguous territory." Of course a universal howl went up, and with pretty good reason when one pauses to think how much of the commerce from the West to the East would be affected by the broad language of the Secretary's circular.

Of course the government never makes mistakes; at least no government has ever acknowledged a blunder; and so when the howl rent the heavens, Secretary Manning proceeded to explain the language of his circular, which certainly needed explanation, if the government of the United States were not to rest under the imputation of assisting to "bull" Lake Shore stock. According to his explanation the most objectionable parts of the circular are eliminated. Domestic produce may still be shipped through Canada by rail or water, from one American port to another without payment of duty on presentation of proper proofs that the merchandise is an American product. The greatest blow is dealt to the Canadian transportation companies, as these can not trade between American ports. So American vessel owners really have nothing to complain of, as there is none too much freight for our own vessels to carry.

## THE CROPS.

Notwithstanding the partial failure of the winter wheat crop, this crop year bids fair to be a remunerative one to farmers. The month of June was favorable to the winter wheat crop, and the yield is probably 215,000,000 bushels. This, with the probable yield of the spring wheat country, will give 360,000,000 bushels of wheat as the result of the crop year 1885.

The unprecedented corn area of last year is increased about 6 per cent. this year, due, largely, to the plowing up of so much winter grain. The acreage is in the neighborhood of 76,000,000 acres. The largest increase is in the Missouri Valley. The condition of corn is higher than in any year since 1880 except the last. It averages 94 against 93 in 1884. It is highest in the South and higher on the Atlantic coast than in the West. The Kansas average is 83; Michigan and Missouri, 87; Wisconsin, 88; Illinois, 90; Iowa, 92; Minnesota, 93; Ohio and Nebraska, 97. The average of winter rye has increased from 73 to 87 since June 1. The general average for oats is 97 in place of 93 last month. Oats have shared with all the cereals in the improvement of the month. The only states below 90 are New Jersey, North Carolina, South Carolina, Georgia, Mississippi and California. The condition of barley averages 92, and of tobacco 96.

Of course the corn is a long way from insuring a large crop; but at the present time everything

promises that way. So our elevators will have plenty of stuff to handle and the railroads plenty to carry, and something done toward a restoration of prosperity.

## THE CANADIAN CANALS.

The Canadian Government has long been a model to pattern after in the strenuous efforts it has made to build up Canada's commerce with the world. Over a hundred million dollars have been spent on her canals with a view of building up the Canadian export trade in competition with that by way of the Erie Canal. The freeing of the latter has diverted a good deal of trade from Montreal, and now the Canadian Government has taken eighty per cent. off the tolls exacted on the St. Lawrence system in the hope of diverting the traffic from the Erie back into the old channels. The remaining twenty per cent. is still a burden on Canadian shipping, and an effort is now being made to have the Government make the canal system entirely free, like the Erie.

But, of course, one obstacle intervenes in the way of making Montreal in any sense a rival of New York as a great shipping point. Canada is not a heavy buyer, while this country is. Shipping goes where it is sure of a cargo, and so long as both Canada and the United States have protective duties, Montreal's shipping must needs be smaller than that of American ports which have behind them a larger purchasing constituency than has Montreal.

## ELEVATORS FOR RUSSIA.

At various times we have noticed the interest developing in Russia in the elevator question, the last occasion being when the Duc de Morny was in this country to examine into the working of the American elevator system. In Russia things move slowly, but the government now seems willing to make all necessary concessions to the builders of elevators.

The minister of finance is authorized to issue a license to any applicant for the erection of grain elevators, providing he or they transact the business in accordance with the laws regulating stock companies. All railroad companies guaranteed by the state are permitted to build elevators, providing they secure the management of such structures by an independent capital set aside for that purpose. The elevators must accept and store all grains sent to them, and are not allowed to prefer one producer to another. The work of such elevator companies is restricted to the following manipulations: *A*, receipt and shipment of grains; *B*, transportation to the nearest railway depot or harbor; *C*, separation, drying and weighing; *D*, the payment of duties; *E*, insurance against fire and other dangers; *F*, shipping of the produce according to the instructions of the owners; *G*, the advance of money on grains according to the laws of stock companies. Damages and shortages are to be borne by the elevator companies unless it can be proved that the loss was caused by third parties. These elevator companies are to be taxed according to the rules applied to other stock companies.

Russia is a land of mighty resources, and the building of a system of elevators will no doubt increase very materially her exports of grain.

The secretary of the Transportation Bureau, at St. Louis, has written to the Illinois Railroad and Warehouse Commissioners inquiring if the present board claim that they have jurisdiction over rates of transportation on grain and provisions shipped to Chicago from some point in Missouri. The decision of the former board that it was inter-state commerce has almost ruined the trade between Missouri points and Chicago; and the present board is inclined to assert the doctrine that the board has authority to fix the rates, so long as the company making them is an Illinois corporation; at least, so far as the Illinois part of the route is concerned.



## Editorial Mention.

ITALY raises about 140,000,000 bushels of wheat this year.

How much *invisible* supply of wheat is there in your neighborhood?

ELEVATORS will soon begin to fill up with grain, and then we shall hear of their sides giving way.

NOTWITHSTANDING the fact that Chicago elevators are full to the top with grain, there is no "hot" grain in them.

JOHN WEBSTER, of Detroit, is superintending the work on McMorran & Co.'s 150,000-bushel elevator at Port Huron, Mich.

BUFFALO elevators, like those of Chicago, are loaded up with wheat. The latter grain moves slowly out, while corn is moving very freely.

MESSRS. JOHNSON & FIELD, Racine, Wis., manufacturers of the "Dustless" Grain Separator, report a good demand for their Separator this season.

OUR correspondent, Mr. Stackpole, agrees with Statistician Dodge in urging the farmers to hold back the crop until some of the surplus is out of the way.

J. R. MEGRUE & Co., grain commission merchants, of Cincinnati, have moved their offices to the Carlisle Building, corner Fourth and Walnut streets, that city.

THE same influences that made the Erie a free canal will take care that it is suitably improved, and that it maintains a proper place in the system of our waterways.

THE cost of transportation and elevator handling of wheat from the Red River Valley to Duluth or Minneapolis is estimated at 13 cents, and to Liverpool, 38 cents.

OLD spring wheat is now being shipped into the winter wheat country to supply the mills; and it is a pertinent question, what the demand will be when 1886 comes around.

THE "visible supply" seems still to worry a good many people. It is well to know how much wheat is in sight; but people "bank" altogether too much on the visible supply.

NEW YORK men deny that the inspection there is careless, or so low that buyers have lost confidence in New York inspection. Still, state inspection is what New York needs.

OUR exports of wheat and flour for the year ended June 30 were about 140,000,000 bushels. When we consider the state of the world's market for a year past, this is not a bad showing.

COMMENCE on your congressman *now* and impress on his tottering intellect that what this country needs is not harbor improvements on the coast half so much as improvements for internal navigation.

MESSRS. CALLAGHAN & SONS, of Louisville, Ky., have written us some particulars of trouble which they have lately had with a grain firm in Illinois (not named), that shipped to them, and whom they had to sue to get even with. They call at-

tention to one trouble which is old as the grain business itself, that sellers ship and draw with bill of lading attached, and the buyer must run the risk of weight and goods being up to grade.

Two interesting communications appear in this issue, one from Mr. Abernathy and the other from Mr. Colton. Their views may be accepted as disinterested, as the writers are neither "long" or "short."

A WASHINGTON bucket-shop has sued a Chicago bucket-shop. These sort of folks don't seem to "hang together" as might be expected. The airing of bucket-shop business in court will do the fraternity no good.

A FREE Navigation League has been inaugurated at Montreal, to abolish all tolls. It is recalled, however, that the grain exports of Montreal have steadily declined since 1873, even when the tolls remained on the Erie Canal.

MCGEOCH's June oat deal did not cost McGeech much, neither did he make anything out of it. The corn fellows who have been monkeying with corn since May have got out from behind it with a loss, although their cash corn sold for more than they paid for it.

PROF. DODGE, of the Washington Agricultural Bureau, says that while the world's wheat crop for 1885 is below the average, the amount of old wheat on hand is, nevertheless, so large that it will be a number of months before the effects of the shortage will be felt.

THE harvest in the south of France was satisfactory. Crop reports from Germany are generally favorable, except as to rye. The advices from Austro-Hungary as to both rye and wheat are less favorable. In the south of Russia there is reported another severe drouth.

ELEVATOR men who are looking for an automatic weigher are referred to the advertisement of Messrs. Zinn & Kayser, of 63 Prince street, New York City, who make and sell the American Automatic Scale and Register. Their circular gives full particulars of the machine.

THE Improved Chicago Car Mover is an appliance which has now come into extensive use owing to its peculiar merits. It is well made and cheap, and is sold on trial. Mr. Chas. T. Barnes, 335 West Monroe street, Chicago, is the manufacturer, and will give full particulars.

It is said that a Chicago grain dealer gave an accommodating New York hotel clerk pointers on the market, and the clerk is now worth half a million dollars. We do not believe the story for the reason that we doubt the existence of an "accommodating hotel clerk," to start with.

THE *Northwestern Miller* thinks that Minneapolis will soon lead all other cities in the amount of capital invested in grain elevators. This refers not so much to local houses and capacity as to the lines of elevators built and building through Minnesota and Dakota, and controlled in Minneapolis.

QUITE an important question was recently propounded to the Illinois Board of Railroad and Warehouse Commissioners, by the grain firm of Harper & Co., of Peoria. The question was: "Can a consignee, shipping grain over any railroad, compel that road to deliver the consignment at an elevator located on another railroad company's tracks without that company's permission?" We are not aware that this question has ever been raised before. The secretary wrote Messrs. Harper & Co. that he knew of no provision of the law that would compel one road to allow another road the use of its tracks; but one of the

commissioners is said to favor the idea that the railroads should be compelled to allow delivery to an elevator on their tracks by another road on payment of a reasonable charge. It will at once be seen that this is an important question, and the Commissioners have promised to consider the point and pass upon it.

THE CAMBRIDGE ROOFING Co., of Cambridge, Ohio, naturally feel elated over getting the first medal at the World's Exposition. Their goods have come into prominence from their wide use and excellent character; and this award will no doubt serve to increase their already large business.

"TOLEDO" draws a very ingenious analogy between special bins in elevators and the protective tariff. As the writer says, now is a good time to discuss such questions, as they can be separated from "entangling political alliances," and discussed on their merits. Let us hear from all sides.

MESSRS. CLAUSSEN BROS., grain dealers at Clear Lake, Iowa, write us: "With pleasure we renew our subscription to your AMERICAN ELEVATOR AND GRAIN TRADE. It has been a great informer to us the last few months, as we are this year improving our elevator here, and through your paper have been enabled to select and acquaint ourselves with the latest improved machinery."

KANSAS CITY has determined to have a new Board of Trade building. Some months ago it became apparent that the old building was steadily getting too small; and the drift of sentiment among members has been toward the erection of a new building. The structure will cost \$300,000, and is intended to be in every way creditable to the enterprise of the Chicago of the Missouri River.

It hardly looks as if cornering the market pays the cornerers. The trouble with corners, whether in grain or stocks, is that the cornerers have trouble in dodging the avalanche which they themselves have precipitated. When Hannibal & St. Joe was cornered some time ago, everybody supposed the Duff clique had made a mint of money; but it has since leaked out that the deal nearly ruined all of them.

THE "Camaret" brand of roofing plate has become so popular that the sales of it have reached immense proportions. The manufacturers' general agents have received numerous testimonials as to the excellence of this plate, and the goods are sold under guarantee. Messrs. Merchant & Co., the general agents, 525 Arch street, Philadelphia, also furnish this brand, made up into shingles. Notice the card on another page.

CHANDLER-BROWN Co., commission merchants, 97 Board of Trade, this city, whose card appears on the front cover of this issue, are not only among the oldest established houses in the trade and also of the most highly esteemed for business capacity and push, but for financial strength and social qualities as well. Besides doing a large receiving business, they have an extensive trade in contracts, each department being kept entirely separate. The attention of readers in the trade who have Chicago business is directed to this firm as being one of the best known and reliable in the business.

THE Supreme Court of Indiana has, in deciding a recent case, undoubtedly set a precedent which will be quoted in future cases where the liability of railroad companies for fires caused by locomotives is in question. In the summer of 1880 the starch works of J. A. & J. H. Cunningham, at Vincennes, were burned by sparks from a locomotive on the Evansville & Terre Haute Railroad. The owners of the destroyed starch works sued the railroad company for \$200,000. The case ran



through the whole gamut of courts, and the Supreme Court finally sustained the plaintiffs, and asserted the liability of the railroad company.

THE case of Nicholas E. Phillips and Noah Swickard *versus* P. Risser & Sons, of Onarga, Ill., was decided by Judge Blodgett on June 29. The suit was brought to restrain infringement of Swickard's patent on Grain Dumps, and was virtually the suit of J. M. Harper against the Illinois Grain Dealers' Association. Judge Blodgett decides that the defendant's devices infringed the first claim of the Swickard Reissue, but that the reissue was void, owing to expansion. The original patent was granted in 1868, and reissued in 1870. The plaintiffs appealed the case to the U. S. Supreme Court.

### THE KANSAS WHEAT CROP.

The bulls and bears have fought their hardest battle on the wheat fields of Kansas. For weeks all sorts of reports have issued from the state; some dyed with the deepest blue and others showing the silver lining behind the cloud. That the crop would be short, none have denied; but that it would be a total failure, as many have predicted, has all along been contradicted by the hopefully inclined. The progress of the harvest has largely verified the predictions of the hopeful bears, and as one of the brethren who has been over the state writes us: "The bulls who are looking for one-fourth of a crop only, will be badly left."

Mr. Abernathy, who has been over the state, writes us in the same strain, as will be seen from his interesting letter on another page. He is inclined to double the lowest "bull" estimate and make the crop 15,000,000 bushels; while some would not be surprised to find 20,000,000 bushels when the returns are all in. It is certainly a noticeable fact that the Agricultural Department has raised its estimate, and now places the probable yield of the entire country at 363,000,000 bushels. All the winter wheat country suffers from shortage; and the lugubrious report from one section has had its effect on another, until all have believed matters worse than they are. The reality is bad enough, and we hope the shortage is less than even the Department estimates.

### THE ENLARGEMENT OF THE ERIE.

While the Erie Canal no doubt needs improvement in many respects, there is folly in attempting to agitate for a ship canal. In these days of elevators and easy transfer there is little use for a ship canal, except that it might shorten the time required to make the trip. The Oswego *Times-Express* has a sensible article on this matter, from which we quote the following:

One of the most absurd and impracticable projects talked of is a ship canal through this state. Some of the New York papers and others outside of the city frequently refer to the advantages to be derived from a ship canal so large in dimensions that a ship shall be able to take in a cargo of grain at Chicago and lay it down in New York without breaking bulk. The Erie canal is three hundred miles long, from Buffalo to the water at Albany. How absurd the idea is, that lake craft, built to buffet the storms of the great lakes, with their tall spars and tons of rigging and top hamper and immense keels, not only useless on the canal but directly in the way and constituting nearly as much of a load as the freight proper, should be dragged by horse or steam power all the way from Buffalo to New York and return, a distance of nine hundred miles or over, when grain can be transferred from lake to canal bottoms for one-eighth of a cent per bushel, and the stirring and airing of the grain by the transfer be worth to the same all the operation would cost. Anybody with the least observation knows that a lake craft is not fitted for a canal boat, and the removal of the bridges in the city or upon the farms, or their conversion into draw bridges with the cost of attendants is not to be thought of. Even upon the lakes the use of barges towed by steam is fast superseding the use of sail vessels. To tow these vessels nine hundred miles with all the cost it involves, will never be attempted, would not even if the capacity of the canal would permit it.

Enlargement may be well, but the game is hardly worth the candle when it is sought to make the Erie navigable for lake vessels.

### VISIBLE SUPPLY OF GRAIN.

Disclaiming any design of competing with the weekly statements of visible supply of grain issued by the New York Produce Exchange and the Chicago Board of Trade, but of doing something supplementary to them by furnishing quarterly exhibits, Bradstreet's journal of last Saturday furnishes extended exhibits, which duplicate the points represented in the other statements, with the addition of various other places to the list. In regard to wheat, the Bradstreet aggregate figures compare with the statement of the New York Produce Exchange as follows, for stocks east of the Rocky Mountains, including Canada:

	Bradstreet.	Prod. Exch.
July 1, 1885.....	48,196,667	37,947,625
April 1, 1885.....	53,574,402	43,660,972
Jan. 1, 1885.....	52,032,004	43,382,190
July 1, 1884.....	38,377,408	14,223,258
July 1, 1883.....	19,764,952	19,418,915
July 1, 1882.....	10,398,831	10,107,430

We fail to discover any essentially valuable service in the work thus performed by Bradstreet's. For the same points and items which make up the aggregate of the Produce Exchange report, 37,947,625 bushels for July 1, (June 27), Bradstreet figures show 37,631,694 bushels. One of the disparities in the exhibits is the affort stocks at New York, reported 162,056 by the Produce Exchange and 31,976 by Bradstreet; the Chicago report had the same item 205,000—making it look as if the smaller report might be decidedly deficient. St. Louis stocks 812,320, according to Bradstreet, and 1,107,383 by Produce Exchange and Chicago reports. Baltimore stocks 1,788,357 by Bradstreet, and 1,494,439 by Produce Exchange and Chicago.

The Bradstreet exhibit is more confusing than useful to the trade. If the effort will be to supplement the work at New York and Chicago by making the fullest and most reliable reports possible of comparative stocks at points not included in those reports, its services will have something of interest in it.—*Cincinnati Price Current.*

### A GREAT SCHEME.

The latest idea in grain trading is the Grain Traders' Guaranty Co., which has been launched in this city with offices over the Open Board of Trade. The circular explaining the *modus operandi* opens by pointing out the sad fact that whereas merchants and others have for many years had insurance against losses by fire, storm and other calamities, the poor grain speculator has had no protection against losses from the great fluctuations that come about in exciting times. In the "Grain Traders' Guaranty Company" is supplied the thing wanted, and the patronage of the speculators is solicited. The Guaranty Company disclaims any connection with such suspicious phases of trading as "puts" and "calls," but magnanimously offers to protect the trader from loss for the period of time and for the amount of grain covered by the policy issued. The circular then cautiously states that the premium required depends upon the condition of the markets, a higher premium being of course required in exciting times than in quiet times. The method of doing business is pretty much as follows:

As regards the buyer's guaranty, if, for instance, the closing price on August wheat is 90 cents, the company guarantees that the opening price next morning will be 90 cents or higher, and in case the market should open lower the company undertakes to pay the loss caused by the decline from the guaranteed price. As for the seller's guaranty, if August wheat should close, say, at 90 cents, the company guarantees that the market will open next morning at 90 cents or lower, and should the opening price be higher than 90 cents the company promises to pay the loss caused by the advance from the guaranteed price. The circular closes with another fling at "puts" and "calls," and "hedging," and a virtuous puff of the advantages to be derived from insuring with the "Grain Trader's Guaranty Company." Policies are issued on amounts of grain from the modest 500-bushel lot upward, and on provisions down to the fifty-package parcel. Rates and further particulars are supplied at the office, and correspondents are wanted at every unfortunate town where there is speculation.

The modest rates which the company are charging in the present quiet times, assuming that they have already issued some policies, are \$2.50 per 1,000 bushels of wheat. The man, therefore, who wishes a guaranty on 10,000 bushels of wheat will be guaranteed till the time of the opening price next morning in consideration of the modest premium of \$25. If the market should remain stationary, or rise, the guaranty company has realized \$25 from its nineteen hours' guaranty, while the insured speculator has still the comfortable reflection that he was safe during the same period from any ruinous fluctuation. Should, however, the market have fallen one eighth of a cent, the \$25 is divided up, and the guaranty company is still \$12.50 ahead for its nineteen hours' risk. As in quiet times there is seldom more than one-eighth of a cent difference between the closing and opening price, the guaranty company will, as a rule always be half, when not the whole, of the amount of the premium ahead. Should there be one-fourth of a cent difference between the closing and opening price—not a common occurrence—if the market goes against the company, it will only require to hand back the amount of the premium to the party insured. If the difference should prove more than one-fourth of a cent,

then—but it is not within the bounds of credulity to believe that the guaranty company could stand it and still float.

Should fortune smile upon the company there is no doubt whatever that there's money in the business. The foregoing calculations have been made on the basis of only 10,000 bushels, so it is easy to see the piles of cash that can be made out of larger lots. Those who patronize the company are simply paying one-eighth of a cent per bushel for the guaranty that the closing shall be the opening price, and doubtless the company will so regulate its scale of premiums that it will not often come out loser. The specious distinctions which the company draws between its method of insurance and "puts" and "calls" do not readily go down with shrewd operators who have studied the circulars, and who only see in the business a more subtle and delusive form of the "put" and "call."

### CLEAN WHEAT.

George W. Sprague and George W. Haigh, President and Secretary of the Minnesota State Farmers' Alliance, have issued a circular letter relative to the system of "dockage," as it has been practiced in Minnesota for the past few years. After stating the opinion that the system is pernicious and indorsing the action taken by the railway commissioners, the letter continues:

It is a system that prevails in no other state in the Union but Minnesota, the finest wheat country in the world, and which wheat commands the highest price in the world.

First—The farmer gives the offal away.

Second—He hauls it to the country market free.

Third—He pays freight on it from the country markets to the terminal or shipping point, say St. Paul, Minneapolis, or Duluth. A calculation made recently reveals the fact that we have paid freight on about 15,000,000 pounds of dirt the past year to Minneapolis alone, saying nothing about Duluth or St. Paul.

Fourth—It is based upon a system of "guess work," and common sense will tell us that when the buyer or elevator guesses against the farmer as to the amount of dirt in his load of grain, in 99 cases out of 100 the buyer is going to make himself safe, and, if possible, more than safe.

Now, what we wish to impress upon the farmer is to ever bear this in mind, if we cannot completely carry out a system of reform, and market clean grain, let us get it as clean as we can. Let every farmer see to it that each threshing machine has its sieve screens on, and insist that this shall be done, and flatly and positively refuse to employ any thrasher who has not his screen so attached, and once so attached see that it is kept clean and free and not clogged up, and thus become useless; also, have the screenings hrown back from time to time into the machine, and thus reduce the volume of screenings or offal.

### BOARD OF TRADE CONTRACTS.

The Supreme Court of Iowa has been wrestling with the question of Board of Trade contracts, and its decision is in the general line of other court decisions on the same subject. It holds that gambling contracts are void, and that a mutual understanding that a deal or transaction was to be settled, not by delivering the property involved, but by the payment of differences between the contract price and the market price of the commodity, made it such a contract. They hold, in addition, however, that what one party to the contract might declare to be its intent and purpose is not evidence of such a mutual understanding as is indicated in the rule. In other words, one party to a Board of Trade deal can not evade its obligations by pleading the baby act unless he can prove that the other party understood it as he did to be a gambling transaction.

In this case, J. N. Green, President of the Oskaloosa Packing Company, gave the notes of the company to Stiles, Goldy & McMahon, a Chicago Board of Trade firm, to reimburse them for margins advanced on 600,000 pounds of short ribs, which they had purchased on the Oskaloosa Company's account, in accordance with his order. The notes were discounted, or at least were held by the First National Bank of Lyons, Iowa—and, not being paid, suit was brought by the bank. In the lower court, where this suit was tried as to the facts, the jury found in their verdict that neither Green nor the Chicago firm, as a party to the short ribs deal, contemplated that there was to be an actual delivery of the property. Considerable correspondence between the parties appeared in the testimony, and this fact was made very clear on its face. The court therefore held that the transaction was a gambling contract, and that the note was void. This is the judgment affirmed by the Supreme Court in its decision.

In their decision, however, the court affirm that it must appear by the preponderance of evidence that both parties understood it to be a gambling contract; the understanding of one party does not so taint a deal with the gambling element as to render it fraudulent and void. They clinch this doctrine by holding that a party to the contract is incompetent to testify as to his intentions in entering upon it.

This would appear to be sufficient grounds for the protection of ordinary Board of Trade transactions. In Wisconsin a law has been enacted affirmatively declaring that in order to constitute a gambling contract it must appear in proof that both parties considered that differences only were to be paid, and no property was to be delivered. In the Iowa case the Chicago firm furnished the strongest evidence against itself in its books and in its correspondence with Green. The moral of this case, like that in most cases, lies on the surface. Board of Trade firms should have transactions appear straight on their books, and should not give themselves away in compromising letters.—*Chicago Journal.*



## THE NEED OF RELIABLE CROP REPORTS.

It has been known since the early spring that the winter wheat crop is to be a short one. The first reports were discouraging, and the succeeding ones have grown gradually worse. It is impossible to say to-day what the estimate will be to-morrow, except that the figures will probably continue to be lowered. The Agricultural Department at Washington, to which we should be able to look with some confidence for information upon a matter of this kind, is practically useless, inasmuch as its statistics vary like the weather-guessers of the Signal Service Bureau, and seems to be prepared in much the same way, to-wit, for periods of twenty-four hours at a time only, and subject to conditions which may at any moment upset the whole calculation. In the case of weather-guessing, however, no guarantee of exactitude is given, and no pretense made of doing anything more than to certify probabilities, whereas the Agricultural Department's crop reports are supposed to represent definite facts and to deal with things accurately ascertained and truly reported—and unless they do possess that virtue they are not only valueless, but mischievous.

The experience of the last ninety days has shown in a very plain and significant way that these reports as applied to the wheat crop are utterly unreliable. They have served a speculative purpose, and that is all. The bears in the leading markets have been enabled to realize a handsome profit upon what is now confessed was a fiction. That is to say, the legitimate business interests of the country, all of which are more or less dependent upon the wheat crop, were deceived and misled for the benefit of the option trafficking class exclusively, or of one division of that class, strictly speaking. To say that the deception was a purposed and calculated one would not be quite just, perhaps; but the effect was precisely the same as if such an intention had been present. What should have been information of a well-substantiated and conclusive kind turned out to be in reality not mere guesswork only but guesswork of a description that carries with it a positive damage to those for whose advantage crop reports are understood to be chiefly furnished under authority of the government, and at considerable public expense.

As a matter of fact, it is idle to expect the Agricultural Department to supply trustworthy crop statistics, considering the manner in which they are procured. The stamp of authority does not extend to the sources from which the alleged information is derived; the money expended goes mainly to pay for the tabulation of figures that are in the nature of things superficial, incomplete, and easy to "doctor" to any desired end. There is no such provision for gathering the data required as can be held to warrant reasonable belief that the ground is thoroughly covered, or that the persons directly entrusted with the work of observation are properly qualified and responsible. The agents of the department are voluntary as a rule, and have no official power or standing. It is impossible to hold them to a close accountability, and equally impracticable to determine what different methods may be employed in different places to arrive at a common kind of conclusion. And what is of still more importance, when the local reports are all in, the department, having the last guess, may exercise a degree of discretion, under the present arrangements, that is in effect simply autocratic.

No space need be wasted in pointing out that crop reports based upon such circumstances as these are worse than no reports at all. They gain a given credence and have a given influence because they come from the government printing office and bear an official indorsement. In our characteristic and indiscriminating respect for everything that is commended to us in that way, we do not stop to consider what the measure of real value may or may not be, apart from the mere fact that a department of some sort has said so and so. Any intelligent man knows that statistics count for nothing unless they have been fully verified and are as far as they go, indisputably correct; and the system, or want of system, rather, which governs the gathering of crop news in Washington forbids all idea of verification, to start with. The truth stands confessed that the department has recently blundered to an extent that could hardly have been greater if the statistician had gone to bed with a perfectly unimpaired mind and dreamed an estimate of the winter wheat crop. Clearly, if such gross errors are possible, then the plan of calculation must be fundamentally loose and profitless, and it is folly to look for results from it that can in any respect justify its pretensions.

Crop reports of an authentic and comprehensive character are very desirable. The government could not spend money for a better object than that of securing and disseminating such information. But the present methods will have to be materially improved before good work can be done in that connection. It seems to us, as we have heretofore urged, that a practical and satisfactory plan would be to constitute the postmasters throughout the country the agents of the government for making the necessary observations, and require them to attend to the matter as a part of their official duties and under the same responsibility that attaches to them in the transaction of regular postoffice business. They have excellent facilities for becoming acquainted with the agricultural situation in their respective localities, and could with very little trouble render reports at stated intervals which, being combined at certain central points, would give to the public an intelligent and truly

serviceable idea of the outlook. The whole country is interested in the crops, and every branch of trade is affected by their condition during the growing season; the very cost of living, in fact, is largely regulated by that influence. Whatever tends, therefore, to make the facts generally known in such behalf is a benefit to everybody; and on the other hand, whatever tends to circulate inexact and haphazard statements on that subject is a decided detriment. If we cannot have statistics that we can depend upon, it would be preferable to dispense with them altogether, and let each individual do his own guessing, unbiased by figures that only serve to confuse and mislead.—*Globe-Democrat*.

## THE WHEAT SURPLUS.

The extended inquiry as to available stocks of wheat in the United States and Canada, published in Bradstreet's last week, renders possible a clearer calculation of the probable surplus carried over on July 1, 1885, which in turn becomes of exceptional value in estimating the probable supply for the year 1885-86. It is generally admitted that the wheat crop which is now beginning to be harvested, is very short. According to the most favorable view which the Washington Agricultural Bureau is able to take of the situation, the total harvest of spring and winter wheat is not likely to exceed 370,000,000 and it may go as low as 350,000,000 bushels. In the crop year 1881-83 (ending June 30) the harvest was short, the aggregate yield amounting to but 380,000,000 bushels. By the end of the succeeding year, by June 30, 1883, stocks were low indeed. The total visible supply, according to the New York Produce Exchange Report, on July 1, 1883, was 19,400,000 bushels. This included the territory east of the Rocky Mountains and Ontario and Quebec in Canada. Bradstreet's more complete report of stocks of wheat for that date, including the Pacific Coast, amounted to 21,400,000 bushels, and it was notorious that invisible supplies were very small, probably not in excess of 13,000,000 bushels. This would indicate that only a "famine supply" was carried over on July 1, 1883. With this as a starting point, the following calculation concerning consumption and surpluses since that date is rendered possible:

Stocks wheat carried over July 1, 1883.....	35,000,000
Crop wheat 1882-83.....	504,000,000

Total wheat available in 1883-84.....	539,000,000
---------------------------------------	-------------

The aggregate exports of wheat, and of wheat flour reduced to wheat, in the three years succeeding the last short wheat harvest, together with the available supplies in 1883, have been:

	Total production.	Total wheat and flour exported.
In 1882-83.....	539,000,000	148,700,000
In 1883-84.....	420,000,000	111,500,000
In 1884-85.....	512,000,000	135,000,000
Totals.....	1,471,000,000	395,200,000

The minimum calculations of wheat consumed at home, including for seeding, the manufactures, etc., give for the years named a total of 960,000,000 bushels. This, with the quantity exported, amounts to 1,355,200,000 bushels, which points to a total of 115,800,000 bushels of wheat carried over in the United States and Canada on July 1, 1885. Of this amount, say 20,000,000 bushels will have to be regarded as the famine reserve, which indicates that there are 95,000,000 bushels of available old crop wheat. Of this Bradstreet's last week accounts for 58,000,000 bushels, an actual visible supply, to which must be added 10,000,000 bushels held by millers and jobbers as flour, or in all 68,000,000 bushels actual wheat supply in sight, from which it is to be inferred that there are something like 48,000,000 bushels in first hands, of which about 28,000,000 will be available.

With a crop (1884-85) of 360,000,000 bushels and 100,000,000 available surplus, the total supply for 1885-86 would amount to 460,000,000 bushels. This outlook, if finally borne out by the facts, means that the United States has raised enough wheat for its own consumption on a liberal basis, and that the surplus carried over from the three preceding crops, about 95,000,000 (after deducting a famine surplus reserve), will be all that is likely to become available for export during the coming cereal year. With the known or reported generally unfavorable conditions respecting the crops in other leading exporting countries, and with the 40,000,000 bushels shortage in France and England alone, the bulls and bears on the grain exchanges of the country may interpret the figures given above to suit themselves, so far as the probable effect on prices is concerned.—*Bradstreet's*, July 11.

## EAST BOUND RATES FROM CHICAGO.

The roads running east from this city have at last agreed to advance east-bound freight rates to the basis of 15 cents per 100 pounds on thirteenth class (grain, flour and millstuffs) and 20 cents on twelfth-class (provisions) from Chicago to New York. This is 5 cents per 100 pounds less than the rates agreed upon at the general managers' meeting in Cincinnati. The rate on grain heretofore has been from 11½ to 13 cents per 100 pounds. Shippers will not object to this advance, as it costs the railroads about 15 cents to transport and handle the article, and no one desires that railroads should carry the freight at a loss. All that shippers desire is reasonable rates and no sudden fluctuations. It is generally

admitted that the railroads would have made a mistake if they had advanced the rates to a 20-cent basis, as the present condition of affairs would warrant no such rate. It is even doubtful whether they will be able, under existing circumstances, to maintain the 15-cent rate. They could get but very little business at the 12 cent and 13-cent rate, and the advance, small as it is, will still further reduce shipments. The great danger is, that when the roads have plenty of idle cars here which are needed in the East to bring back west-bound freight (and the coal movement is about to set in) they will take freight at cut rates, as it pays them better to take the cars to the East loaded than empty, though they get but low rates.

After considering the question of an advance in east-bound rates at the meeting, June 30, the following resolution was passed:

*Resolved*, That we will not make to New York, commencing July 1, 1885, a less rate than 15 cents per 100 pounds on thirteenth-class and 20 cents per 100 pounds on twelfth-class, and nothing less on other classes than the rates of the tariff of April 6, and the amended tariff of April 21, excepting the rates on dressed beef, dressed sheep and dressed hogs. The usual differences to Boston, Philadelphia, Baltimore, and other points to be made as printed in tariff of April 6.

*Resolved*, That no rate to New England non-competing points shall be less than 25 cents on thirteenth-class.

The new tariff on twelfth and thirteenth-classes, which goes into effect to-day, will be as follows to the various Eastern points:

	Class 12.	Class 13.
New York.....	20	15
Boston.....	20	20
Philadelphia.....	18	13
Baltimore and Washington.....	17	12
Albany, Troy and Schenectady.....	20	15
Buffalo and Pittsburg.....	12½	10

The following rules were adopted by the Chicago committee governing freights to be forwarded prior to advance in rates July 1, 1885: "All property consigned from the West direct to a point in the East previous to July 1, 1885, and upon which shipping directions have not been changed, will go forward at rates in effect previous to July 1, waybills to bear notation: 'In transit prior to July 1, 1885.' All grain bought on the Board of Trade and ordered over to Eastern lines before July 1, 1885, will go forward at rates in effect previous to that date, providing car numbers are furnished by shippers; waybills to bear notation: 'In transit before July 1, 1885.' All elevator and packing-house orders actually received previous to July 1 will take rates in effect before that date, even if property is not loaded until after that date; waybills to bear notation: 'Order in hand before July 1, 1885.' All cars ordered to lumber district before July 1, 1885, will go forward at rates in effect before that date, provided they are loaded on or before July 7, 1885; waybills to bear notation: 'Order in hand before July 1, 1885.'"

The various roads running east from this city have also agreed upon the following new rates on live stock and dressed beef from Chicago to Eastern points to go into effect to-day:

	Cattle, net rate.	Sheep, net rate.	Hogs, net rate.	Dressed beef, min. weight 20,000 lbs. and over, net rate.
New York.....	25 40	30	60	43½
Boston.....	25 40	30	60	43½
Philadelphia.....	23 38	18	58	40
Baltimore.....	22 37	17	57	38½
Albany.....	20 32	30	18	35
Buffalo, Suspension Bridge, Pittsburg, Wheeling and Bellaire, Dunkirk, Erie.	15 22½	12½	32½	26

## IT MADE A DIFFERENCE.

"Love you!" echoed the young man; "why, I'd walk through the fires of Hades to sit by your side for ten minutes."

"That's awfully nice. I wish pa loved ma that way."

"Doesn't he?"

"O, no. She asked him at dinner for a \$300 camel's-hair shawl, and he made her cry."

"How?"

"Why, he said that, with wheat touching a dollar, and he half a million bushels short on a delivery at 87 cents, she'd better be thinking of calico at six cents a yard. Why, what ails you, Augustus?"

"I—I—that is, I've got to meet a man at sharp 3. Half a million bushels short, eh? Good-day, Miss Fairbanks."

And he went off kicking himself for not being in love with an ice-dealer's daughter.—*Wall Street Daily News*.

## BETTER THAN WHEAT.

"Dear me," she said, as she fidgeted around in the seat, "but I wish I had a little more nerve. Yesterday I drew \$200 from the bank to put into wheat, but when I thought of wheat going way up and somebody else losing, and of wheat going way down and my money vanishing away, I couldn't have the courage to place an order."

"And you took the money back?"

"Oh, no, no! I used it to buy me a poodle. The poodle market is very firm, with no danger of a break ahead; and ma says I showed great financial sense. Are you long or short of poodles?"—*Wall Street News*.



## OUR WHEAT SUPPLY.

We notice that a great deal is being said in some quarters about the largeness of the visible supply of wheat as a reason for ignoring the now admitted fact of a shortage in our crop for this year. The nearly 15,000,000 bushels in store in Chicago, being a little more than one third of the whole quantity in sight on this continent, is especially referred to as a standing proof that there is more wheat on hand than the world wants, and that prices will have to go lower in order to induce its removal to make room for a new crop. The carpers seem to be afraid that some terrible necessity exists for shipping it all out before harvest.

We have no wish to say anything that will influence the price of wheat in this or any other market. That is a point which will be determined by the consensus of opinion among those who handle the article, and that opinion will largely depend on the development of facts in regard to the coming harvest here and abroad. But there should be no great occasion for alarm at the idea of carrying out present stocks of wheat over into another crop year, even if the yield of the coming harvest promised to be a good one, which it certainly does not. The grain warehouses of Chicago may not have been built on the spur of the humanitarian motives that dictated the construction of the granaries which Joseph had made to his order in Egypt some 4,000 years ago, but they may equally subserve a useful purpose for all that. They offer just the facilities required for carrying over the surplus of one year into the comparative scarcity of another, and the capital that centers here can not find more useful or more honorable employment than in such service. Independently of the fact that the gathering of so much grain here makes a market that establishes a price at which the holder can realize at any desired moment, the undisputed function of such warehouses is to carry the grain over the period that comes between its production by the farmer and its consumption by the other part of the world. Everybody concedes that to be true with regard to a part of the crop year, and it can scarcely be less legitimate to extend the operation of the system a few months than it is for the wage-worker to save a few dollars from his last week's pay and store that in his pocket or the savings bank while earning his next weekly stipend. We may even claim that it is inconsistent with the dictates of common sense for either the individual or a people to count so confidently on the crop of the next year as to think it an imperative duty to get rid of the old before the new is available. It is a policy that worked grievous hardship in the days of Joseph, and we have no guarantee that the policy is a safe one to-day.

## THE CANADIAN CANALS.

The Dominion of Canada has exhibited great enterprise in the effort to attract the commerce of the West to its waterways. The Canadians believe that the St. Lawrence route is the most natural one to be followed by the surplus produce of the Western states on their way to the Old World, and for the reflex commerce that should properly accompany the movement. They have spent a large amount of money in partially removing the obstacles placed by nature to navigation along that route. Altogether the expenditure thus far incurred aggregates some \$90,000,000. Yet it is now proposed to spend another \$50,000,000 in broadening and deepening the canals; and pending the execution of that work to abolish the existing tolls, making the St. Lawrence and its canals a free highway to Europe.

The last-named measure is understood to be pressed chiefly by two of the three steamship lines which transact the great bulk of the carrying business between Montreal and British ports. The Canadian ministry is said to favor it so decidedly that its adoption is regarded as only a matter of routine—to be taken up as reached on the list of state papers now in hand. On this understanding we take the opportunity to voice the sentiment of the trade here, which is that the measure would be of no practical value unless the law contain a section providing that the freight rates from Montreal shall be at all times the same as those from New York. Without some such proviso the Western merchant would have no guarantee, and therefore no confidence, in the change as offering any benefit to him. And this is about the same thing as saying that he would not, to a large extent, patronize the river route under the free toll system.

It seems probable, too, that the time has gone by when the proposed further broadening and deepening of the St. Lawrence canals could be made to pay an interest of anything like 1 per cent. per annum on the cost of the work. There was a time when the Erie Canal was the only competitor with the St. Lawrence route for the carrying trade of the Great West. But now there are not less than eight lines of railway competing with both for the carrying service, and the facilities offered are considerably in excess of the present wants of the trade, however it may be with the future. And there is still another point which has come out forcibly since the direct passage between Chicago and Liverpool was first advocated, some thirty years ago. It was tried by the Norwegian brig *Sleipner*, which arrived here Aug. 4, 1862, and was again essayed by Capt. Prindiville with a cargo of corn from this city. Both experiments proved what had long before been known theoretically—that the passage of both lake and ocean by the same vessel cannot be made to pay. The build of vessel that is best adapted to the ocean is not the one which answers best on the lakes; and it is well known that the difference between the densities of fresh and salt water would

make it necessary to take on or discharge part of the cargo at the mouth of the river, because what is a working load on the ocean would sink the vessel in the river if the keel did not touch bottom before the deck was under water.

The Canadian canals, like those of the Erie system, have subverted a grand purpose over and above the service rendered in carrying vast quantities of material to and from the West. In connection with our great chain of lakes they made it possible to settle the Western states a large part of a century earlier than would have been otherwise possible; have thus opened up a wide field for railroad building, which has been assiduously cultivated within the last thirty years; and have since operated as an invaluable check upon the monopolizing tendencies of the land-carrying corporations. Without the lakes and canals our railroad system would be yet in its infancy so far as the West is concerned, and what railroads had been built would simply hold the public at their mercy. The political economist cannot consistently ignore the value of the waterway, and the commercial man cannot afford to undervalue it, while no petty misplaced patriotic sentiment should be permitted to decry the Canadian water route in comparison with our own. But facts are facts, nevertheless, and one important fact is already stated—to-wit: that there is a limit to the practical value of canal extension in the present day, and that that limit would appear to have been nearly if not quite reached with those which form a part of the St. Lawrence route to the Atlantic ocean.—*Tribune.*

## Special Notices.

**The Chicago Scale Co.** sell Scales of all kinds, also Portable Forges and Blacksmiths' Tools of all descriptions at about one-half usual prices. Buyers will save money by sending for their price list.

### WANTED TO LEASE OR RENT.

An elevator doing a business of from 1300 to 500 carloads a year, with a view of purchasing at the end of that time. Iowa, Kansas, or Nebraska preferred. Address W. J., Box 55, Radnor, Ohio.

### WANTED.

A situation, by a man thoroughly acquainted with the grain business, as superintendent or foreman of an elevator. Has had five years' experience, and thoroughly understands manipulating barley and all kinds of grain. Address

H. J., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

### TO ELEVATOR COMPANIES AND GRAIN MERCHANTS.

A gentleman 48 years of age, having an experience of ten years in buying, selling and shipping all kinds of grain, and during the time named owner of one of the largest elevators in Illinois, desires to engage in the grain business with some one wishing a partner. Will take entire control of the business if desired. Can furnish references as to business ability and character which will be entirely satisfactory. Address Box 755, Bloomington, Ill.

## For Sale.

### GREAT BARGAIN.

Situated on a trunk line, in Ohio and Indiana, in good towns, four nearly new grain warehouses, strictly first-class throughout; for sale cheap. Best of reasons given for wishing to sell. Address

E. E. Co., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

### FOR SALE, A NEW STEAM ELEVATOR.

In Northwestern Iowa, on the C. & N. W. R. R. Capacity, 10,000 bushels. A large crop growing with unsurpassed prospects for a large yield. A good point to make money, and will grow better for years.

Address MATTHEWS BROS, Peterson, Iowa.

### FOR SALE.

Grain elevator in a live town in Western Iowa, with two branch offices if desired. Will be able to handle 250,000 to 300,000 bushels of corn this season, at station where elevator is located; other two, about 100,000 each. Reason for selling, desire to retire from active business. Address

D., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

### FOR SALE CHEAP.

A new Fanning Mill. For particulars address M., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

### FOR SALE—NEW STEAM ELEVATOR.

An Iowa elevator, situated on the C., B. & Q. Railroad. Finest corn district in the state. It is furnished with all the improved machinery; drag belt, crib, three dumps for ear-corn, dumps for small grain; 10,000 bushels capacity and 20,000 bushels crib room. Office and scale on corner lot, with stock yard attached. Elevator has good trade. Prospects for crop are first-class. Address Box 91, Afton, Iowa.

### FOR SALE.

A Kansas elevator situated on the K. C., F. S. & G. R. R., twenty miles from Kansas City. Capacity 10,000 bushels. Meal burr, chop burr, Barnard & Leas Dustless Wheat Separator and Double Cylinder Corn Cleaner Victor Sheller, Wheat and Corn Dump, and about one acre, six lots. Price \$10,000. Address

KANSAS OWNER, care AMERICAN ELEVATOR AND GRAIN TRADE.

### FOR SALE CHEAP.

In Central Illinois, a good steam elevator, equipped with the best machinery, sheller, grain cleaner, mill for grinding meal and feed, three dumps, etc. Capacity of elevator, 10,000 bushels; of corn cribs, 35,000 bushels; thirty miles from Peoria. This station ships more grain than any other on the road. Only two elevators here. Price, \$2,500; no less. Good reason for selling. Address MILLER BROS., Emden, Ill.

## Grain Commission Cards.

M. J. FORBES.

GEO. SPENCER

**GEO. SPENCER & CO.,**  
DULUTH, MINN.

**GRAIN ON COMMISSION.**  
**DULUTH HARD WHEAT**

A Specialty.

**ORDERS FOR CARGOES SOLICITED.**

**A. J. SAWYER,**  
Duluth, Minnesota.

**SHIPPING**  
AND

**GRAIN COMMISSION**

Elevators on Line of N. P. R. R.

**G. S. BARNES & CO.,**  
DULUTH, MINN.

**Shipping and Grain Commission**

ORDERS FOR CARGOES PROMPTLY FILLED.

G. S. BARNES, E. CARDIN, J. Q. ADAMS,  
Pres. N. P. Elev. Co., FARGO. Late with David Dows & Co.  
FARGO. ST. PAUL.

ESTABLISHED 1869.

C. H. GRAVES.

W. VAN BRUNT

**C. H. GRAVES & CO.,**  
—GRAIN—

**COMMISSION MERCHANTS,**  
Duluth, Minnesota,  
U. S. A.

CABLE ADDRESS, - - - GRAVES, DULUTH.



## Grain Commission Cards.

**C. F. LISTMAN & CO.,**  
COMMISSION MERCHANTS,  
FLOUR AND GRAIN.

517 ROYAL INSURANCE BUILDING,  
CHICAGO.

Liberal Advances on Consignments.

Highest References.

## KANSAS CORN.

**FRENCH BROS.,**  
KANSAS CITY, MO.  
Grain Commission Merchants.

## KANSAS WHEAT.

**CABANISS & LUNSFORD,**  
COMMISSION MERCHANTS,  
—RECEIVERS OF—  
**FLOUR, GRAIN, HAY and FEED**  
NO. 21 OLD STREET, PETERSBURG, VA  
Correspondence Solicited.

**W. W. DAVIS,**  
GRAIN COMMISSION,  
ROOM 24, METROPOLITAN BLOCK,  
DULUTH, MINN.  
Advances on Consignments.

**A. BRANDEIS & SON,**  
Grain Dealers  
AND  
Commission Merchants  
LOUISVILLE, KY.  
Correspondence Solicited.

G. B. KIRKBRIDE. M. W. YERXA.  
**YERXA & KIRKBRIDE,**  
Grain Commission  
HARD MILLING WHEAT A SPECIALTY.  
Liberal Advances made to Shippers.  
MINNEAPOLIS, MINN. DULUTH, MINN.

## FOR SALE.

All in Perfect Working Order.

One 160 Horse Power Engine,....	\$1200
One 120 " " " " " "	850
One 100 " " " " " "	750
One 80 " " " " " "	700
One 60 " " " " " "	560
One 50 " " " " " "	550
One 40 " " " " " "	484
One 35 " " " " " "	428
One 30 " " " " " "	384
One 25 " " " " " "	300
One 15 " " " " " "	228

Also the largest stock of Boilers in America.

H. M. SCIPLE, 167 and 169 North 3d Street, Philadelphia, Pa.

—SUBSCRIBE FOR—

**The American Elevator**  
And Grain Trade.  
Only \$1.00 per year.  
Address MITCHELL BROS. CO., Chicago.

## Grain Commission Cards.

ESTABLISHED 1865.

**L. EVERINGHAM & Co.,**  
Commission Merchants,  
200 & 202 ROYAL INSURANCE BUILDING,  
Adjoining Chamber of Commerce. CHICAGO.

Consignments Solicited of Grain, Flax, Seeds,  
Selling by Sample a Specialty.

The Purchase and Sale of Grain and Provisions on the  
Chicago Board of Trade, for Future Delivery,  
on Margins, a Specialty.

Dealers in Grain and Provisions cannot afford to do without their  
carefully prepared and unequalled Crop Reports, which, with their  
Special Information indicating course of markets, have been verified  
in numberless cases, and which are freely furnished upon  
request.

## BUCKLEY, PURSLEY &amp; CO.,

(Successors to Buckley & Co. and Thos. J. Pursley.)

## Grain Commission Merchants

Room 10, Chamber Commerce, PEORIA, ILL.

Returns prompt. Correspondence invited. Best market in the  
world on low grade corn. Charges for selling very small. Refer-  
ences: First National Bank, Mechanics' National Bank, Peoria,  
National Bank, Callender, Ayres & Co.'s Bank.

GOODRIDGE, FIELD & CO.,

## GRAIN AND FLOUR

NORFOLK, VA.

Business attended to at Newport News (Eastern Terminus  
C. & O. Railroad).

**Abner L. Backus & Sons,**  
Commission Merchants  
TOLEDO, OHIO.

Special Attention given to Filling Orders for High Grades Winter  
Wheat. Correspondence Solicited.

**GEO. E. LOWETH,**  
Broker and Commission Merchant

In Grain, Feed, Baled Hay and Straw. Consignments  
Solicited. Liberal advances on consignments. Satis-  
factory references furnished.

Room 9, 158 Superior Street, Cleveland, Ohio.

J. M. GIRVIN. J. H. GIRVIN.  
**J. M. GIRVIN & SON,**  
COMMISSION MERCHANTS,  
Flour, Grain, Feed, Seeds, Hay, Dried Fruits, etc.  
No. 11 Spear's Wharf, BALTIMORE, MD.  
Liberal Advances Made on Consignments.  
REFER TO J. W. GUEST, Cashier Citizens' National Bank, Balti-  
more; WM. H. NORRIS, Cashier Western National Bank, Balti-  
more; JONES & STINCHFIELD and C. W. REQUA & CO.,  
Chicago.

## Grain Commission Cards.

ESTABLISHED 1863.

**CHANDLER-BROWN CO.**

Grain, Seeds and Provision  
Commission Merchants,

CHICAGO—AND—MILWAUKEE.

Correspondence and Consignments Solicited.

JOHN C. LEGG.

THOS. H. BOTTS.

**JOHN C. LEGG & CO.,**  
—GENERAL—

Commission Merchants  
GRAIN and FLOUR,  
No. 7 Spear's Wharf, - - BALTIMORE.

REFERENCES:

First National Bank of Baltimore; Ford & Corbin, New Harmony,  
Ind.; C. A. Gambrill Mfg Co., of Baltimore; D. Baker & Sons,  
Buckeyestown, Md.; Wm. L. Clark, Esq., President Union Bank,  
Winchester, Va.; Jacob Vernier, Archibald, Ohio; Jos. D. Baker,  
Esq., President Montgomery County National Bank, Rockville, Md

THEY GIVE

## PERFECT SATISFACTION!

CAIRO, ILL., May 1, 1885.

Messrs. Webster & Comstock Mfg. Co.,  
Chicago, Ill.

DEAR SIR:—We are using one of your HYDRO-  
STATIC LEVELS, and would not be without it for any-  
thing. It gives perfect satisfaction. My shafts were  
never in as good condition as now since using it. Have  
used it only about a year, but it has paid for itself in  
the saving of oil.

Yours respectfully,

C. H. EVANS, Supt. Cairo Elevator.

Cairo, Ill.

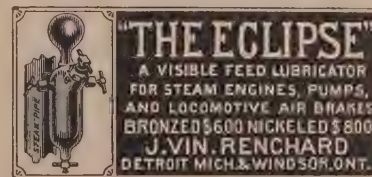
FREMONT, NEB., May 13, 1885.

Webster & Comstock Mfg. Co., Chicago, Ill.

GENTLEMEN:—Your Hydrostatic Level takes the  
cake—We are using three of them. They are all you  
claim for them. Save patience, labor and money.

Yours truly,

SEELEY, SON & Co., Elevator Builders.

SMITH'S PATENT  
BELT FASTENERS

Pat. Sept. 20, '81; Aug. 15, '82;  
June 16, '84.

Are positively  
unequaled for fast-  
ening Leather,  
Rubber or Cot-  
ton Belting.  
The ONLY Fas-  
tener that will run  
under tighteners,  
on patent rolls in  
flour mills, and  
Electric Light ma-  
chines.  
EASIER TO AP-  
PLY THAN LACINGS,  
AND FAR MORE  
ECONOMICAL.

## PRICE LIST.

No. 1. For large Drive Belts, per box of 100,	\$2.00
No. 2. For Cotton " " " " " "	1.75
No. 3. For Rubber " " " " " "	1.50
No. 4. For single Leather Belts, per box,	1.25
Combination Punch, with guides and nippers, 1.25	
Reamers for taking Fasteners out,.....	.35
Try Them. They will save you loss of TIME, TEMPER and MONEY. Manufactured by	
<b>H. D. EDWARDS &amp; CO.,</b>	
Nos. 16, 18 and 20 Woodward Ave., DETROIT, MICH.	
Manufacturers of Oak Leather Belting; Agents for J. B. Hoyt & Co., N. Y. Belting and Packing Co., Eureka Fire Hose Co., Cotton Belting Mill Supplies.	

The Lotz Patent Grain Shoveling Machine  
FOR UNLOADING CARS

Is without clutches and driven by paper friction. It works automatic and noiseless, and the length of  
pull of hoist rope can be instantly adjusted. A big saving in ropes, scoops, lubricants and repairs  
over all other Shoveling Machines, so much so that the entire cost of a machine will be saved by its  
more economical operation within a few years. Eleven Double Machines have been in  
practical operation in Rock Island Elevator "A" Chicago, since 1882.

For further information address

**HOWARD IRON WORKS, Buffalo, N. Y., Sole Mfrs. for the United States.**  
WM. H. LOTZ, Mechanical Engineer, - 68 Metropolitan Block, - Chicago, Ill.

## STEAM GRAIN SHOVELS.

The Rinehart Machines, Patented September 4, 1883, are admitted to be equal  
to the best. Simple in construction, easily operated. They cost less for repairs than  
any Machine built, and they never break ropes or scoops. For a full description see  
illustration in the October, 1884, issue of this paper. Write for prices of double or single  
Machines, as well as for general elevator supplies. Plans furnished for ele-  
vators or storage plants on any description on short notice.

Portable Mills for any Purpose.

W. D. RINEHART, Terre Hau'e, Ind.



# STANDARD MACHINES

— FOR WAREHOUSES AND ELEVATORS —

## THE BARNARD & LEAS MFG. COMPANY'S

THREE-SIEVE DUSTLESS ELEVATOR SEPARATOR.  
 THREE-SIEVE DUSTLESS WAREHOUSE SEPARATOR.  
 IMPROVED DOUBLE-SCREEN DUSTLESS CORN CLEANER, with SHAKE-FEED BOTTOM.  
 THE ADVANCE COMBINED BRUSH AND ROD BEATER BARLEY AND GRAIN SCOURER.  
 Also Manufacturers of the following Standard Milling Machines:  
 DUSTLESS WHEAT SEPARATOR.  
 VICTOR CORN SHELLER.  
 VICTOR SMUTTER.  
 VICTOR LENGTHENED SCOURER.  
 VICTOR DOUBLE BRUSH SCOURER AND POLISHER.  
 ADVANCE COMBINED BRUSH AND SMUT MACHINE.  
 EUREKA FLOUR PACKER, with Barnard's Improvement for Raising Platform.  
 EUREKA BRAN PACKER.  
 LITTLE VICTOR CORN SHELLER.

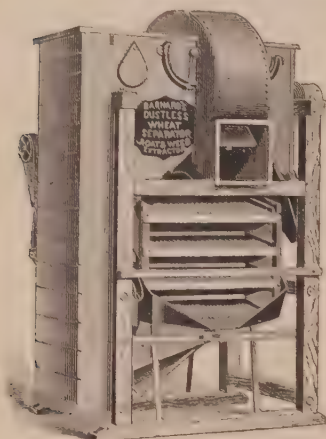
ALSO THE — **DAVERIO 3-HIGH ROLLER MILL,** { The Lightest Running and Most Economical Roll on the Market.

NOTE TESTIMONIAL FROM A WELL KNOWN ELEVATOR FIRM:

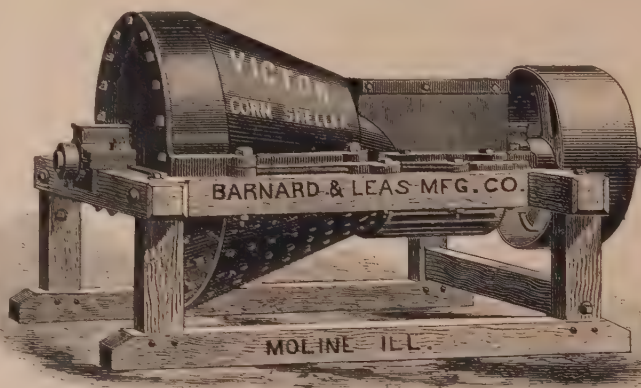
**MESSRS. BARNARD & LEAS, MOLINE, ILL. — GENTLEMEN:** Inclosed please find draft for amount for Warehouse Separator. I must say I am well pleased with the Separator, and will take pleasure in recommending it to others, for I am sure it cannot fail to give the best of satisfaction if purchasers will only follow instructions in setting it up, which is a very easy matter. I superintended the setting up of mine, and it works splendidly.

Yours truly,

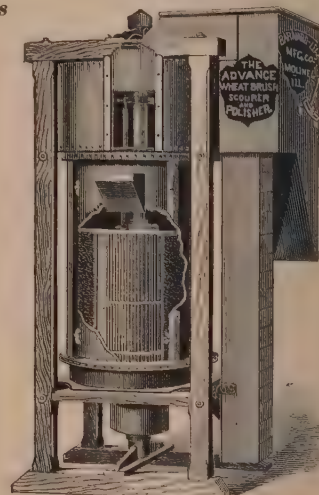
J. M. DAVIDSON.



Separator.



Victor Corn Sheller.



Advance Combined Brush and Rod Beater Barley Scourer.

R. JAMES ABERNATHEY, Gen'l Agent, 523 Delaware St., Kansas City, Mo.

R. L. BROWN, Gen'l Agent, Box 315, Lincoln, Neb.

Send for Illustrated Catalogue and Price List — TO — **THE BARNARD & LEAS MFG. CO., Moline, Ill.**



### THE COMMON-SENSE Automatic Corn Sheller.

The only self-adjusting automatic sheller in the market. It possesses more advantages than any other known machine; takes less power to operate; and adjusts itself to the size of Ear Corn. Will shell more corn, and that too, without splitting the cob; leaves little or no corn on the cob; grinds and breaks less of the kernels; is less liable to be broken (by having some hard substance pass through the sheller) on account of the flexibility of segments and safety pins in plate—which are of wood and can easily be replaced; works right or left, as may be required.

The sheller represented herewith is made entirely of Iron; is well proportioned and built in a most thorough manner; can be adjusted while being operated, by means of the hand-wheel on the rods connected with the lever supporting the center lift. The case and cylinder are both made of segments. The case staves have a spring to hold the bottom close enough to catch any corn which may be on the cob before leaving the machine, the spring yielding to a large cob, also being close enough for the smaller ones.

Six Sizes Made. Send for Prices.

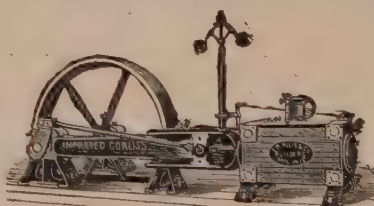
Address **H. A. HAWKINS,**  
248 Randolph Street,  
CHICAGO.

### RELIANCE WORKS,

EDW. P. ALLIS & CO., Props., Milwaukee, Wis.

—SOLE MANUFACTURERS OF THE—

### REYNOLDS-CORLISS ENGINE!



This engine is especially designed for manufacturing purposes, being strong, serviceable, and of the best material and workmanship. Its even speed makes it especially desirable for flouring mills and elevators.

OVER 250 OF THESE ENGINES ARE NOW IN USE, and references can be given. These engines have developed in expert trial and every day work THE HIGHEST ECONOMY KNOWN IN STEAM ENGINEERING!

They will save in fuel 33 to 60 per cent. over any ordinary engine.

We also manufacture Reynolds' Patent AIR PUMP and CONDENSER, which can be used with WATER HEATER AND PURIFIER. Send for Catalogue and Prices to

**EDW. P. ALLIS & CO., Milwaukee, Wis.**

**N. A. HALDEMAN & CO.,**

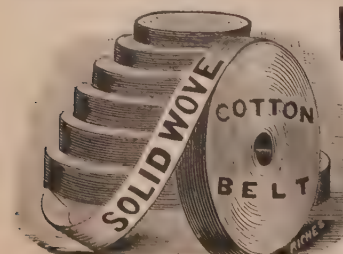
—MANUFACTURERS OF—

### IRON ROOFING AND SIDING!

Jobbers in Felt and Rubber Roofing, Building Papers, Iron Ore Paint, and Cement.

SEND FOR CIRCULARS AND PRICE LIST

1221 Main St., WHEELING, W. VA.



### Elevator and Mill Supplies

Leather, Cotton, Rubber

### BELTING

Elevator Buckets, Bolts, Mill Irons, Etc.

Prices Close, and Quality the Best.

**THE CASE MFG. CO., Columbus, O.**





## BOOKS

### Steam Power

We will send any of the following named Books, postage free, on receipt of annexed Prices:

#### Roper—A Catechism of High Pressure, or Non-Condensing Steam Engines:

Including the Modeling, Construction and Management of Steam Engines and Boilers, with valuable Illustrations. By Sy Stephen Roper, Engineer. Thirteenth edition, revised and enlarged; 12mo., tucks, gilt edge..... \$2.00

#### Roper—Hand Book of Modern Steam Fire Engines:

With illustrations, by Stephen Roper, Engineer. 12mo., tucks, gilt edge..... \$3.50

#### Roper—Use and Abuse of the Steam Boiler:

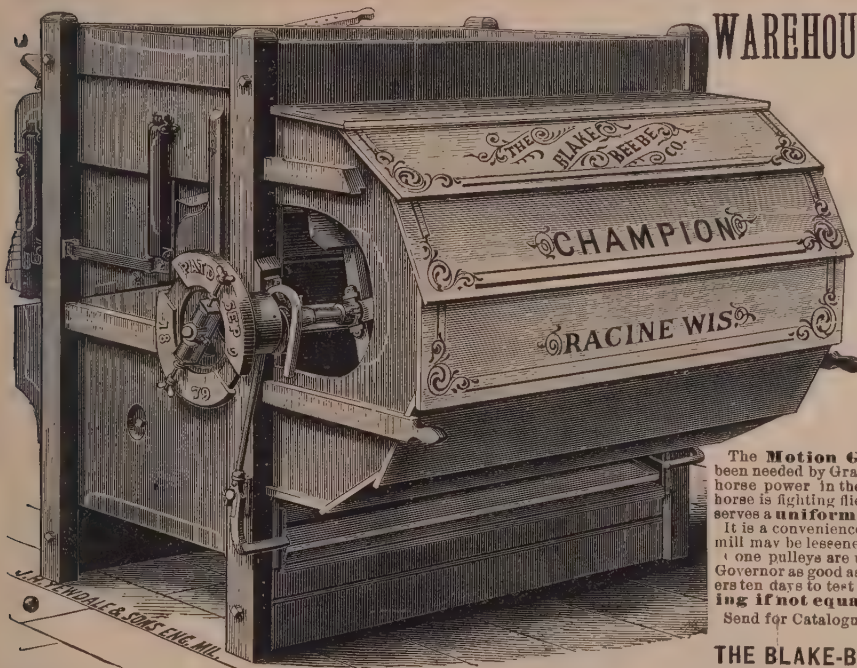
By Stephen Roper, Engineer, Fifth edition; with illustrations. 18mo., tucks, gilt edge..... \$2.00

#### Roper—Engineer's Handy Book..... \$3.50

#### Roper—Questions and Answers for Engineers..... \$3.00

Address

**Mitchell Bros. Co.,**  
184 Dearborn St., Chicago, Ill.



## WAREHOUSE FANNING MILLS.

Cut of No. 6 Mill with Motion Governor.

—CAPACITY—  
**600 BUSHELS**  
PER HOUR.

WE MAKE  
**SEVEN DIFFERENT SIZES**  
—FOR—  
**Warehouses and ELEVATORS.**

More of them in actual and satisfactory use than any other kind.

The **Motion Governor** is something that has long been needed by Grain men, particularly by those who use horse power in their elevators, for it matters not if the horse is fighting flies, jumps or runs, this Governor preserves a **uniform and steady speed.**

It is a convenience with steam power, as the speed of the mill may be lessened or accelerated by it in a moment. One pulley is unnecessary with it. We guarantee this Governor as good as represented and we will allow purchasers ten days to test it, with the **privilege of returning if not equal to the guarantee.**

Send for Catalogue to

**THE BLAKE-BEEBE CO., - RACINE, WIS.**

## H. P. GRAVES' Boiler Purger

For Preserving Iron and Keeping Boilers and Flues from Scaling.

It will remove the scale from any Boiler, and, by its continued use, will keep it from forming. It will not injure the Boiler, Valves or Cylinder, nor foam the water, nor injure the water for drinking purposes. It is easy to use, being in a liquid form; it can be put directly into the Boiler, through the Safety Valve, Whistle Valve, or by Force Pump, or into the Tank.

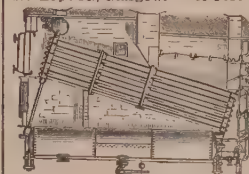
By its use, from fifteen to forty per cent. can be saved in the cost of fuel, besides the expense of putting in new flues every one or two years.

For particulars, address

**H. P. GRAVES,**  
343 Virginia Street, Milwaukee, Wis.

## THE BABCOCK & WILCOX CO.,

Water Tube Steam Boilers,  
107 Hope-st., Glasgow. \*30 Cortlandt-st., New York.



Branch Offices:  
BOSTON:  
50 Oliver-st.  
PHILADEL'A.  
32 N. 5th-st  
PITTSBURGH,  
98 4th-ave.  
CHICAGO,  
64 S. Canal St.  
CINCINNATI,  
64 W. 3d-st.

NEW ORLEANS: 54 Carondelet-st.  
SAN FRANCISCO: 561 Mission-st.  
HAWAII: 50 San Ignacio.

Send to nearest office for Circular.

## Bates' Champion Rapid Grain Dryer!

For Rapidity, Satisfactory Results and Thoroughness  
**UNEQUALED.**

**Get the BEST; the Best is Cheapest.** This important invention is the outcome of the inventor's many years' experience and observation in artificial drying. **No Parch, Shivel or Discoloration.**

The grain is dried at the rate of about 1,000 bushels per hour, the automatic arrangements and low temperature used insuring evenness and uniformity. The capacity, however, can be increased in proportion to power and space afforded, these latter being the only limits. In addition to drying evenly, the operations of the very dry air, peculiar to this machine, remove from the grain any slight odor from sweat or heat, and put it in condition to grade. The air used is a prepared air, and has all the various degrees of low temperature necessary. Damp grain made as dry as rules of inspection require, or as dry even as old grain. Thus the BATES DRYER is the most perfect as well as rapid dryer extant. It is beyond question **The Champion Grain Dryer. Absolutely Safe against Fire.**

The expense of drying by this method is reduced to smallest possible cost, which is below that of any other. Machines are compact. Experienced workmen will be sent to set them up and instruct as to operating. For further particulars address

**J. C. BATES,**  
POST OFFICE BOX 585, - - - CHICAGO, ILL.

L. D. RICHARDS, President.  
ARTHUR TRUESDELL, Secretary.

## Fremont Foundry and Machine Co.

**FREMONT, NEBRASKA,**  
—MANUFACTURE—  
**ENGINES and BOILERS**

OF ALL SIZES.

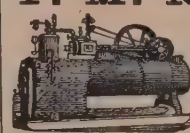
Boots, Shafting, Pulleys, Gearing, Boxes and Hangers especially adapted to **ELEVATOR AND MILL MACHINERY.** Furnish upon short notice

**Corn Shellers, Cleaners, Separators, Scales, Belting, Elevator Buckets, &c.**

We also keep on hand a stock of Governors, Steam Brass Goods, Pipe and all kinds of Engine Fittings. **Special attention given to Repairing.**

If you are intending to build or enlarge, send to us for estimates and prices. Correspondence solicited.

**T. M. NAGLE,**  
ERIE, PA.,  
Manufacturer of  
**Portable,**  
**Stationary**  
and  
**Agricultural**  
**Steam Engines.**



**GENUINE FRENCH BUHR**  
**CORN and FEED MILLS**  
and **POWER CORN SHELLERS.**  
Cheapest and Best in the world. Illustrated circular free.  
**A. W. STEVENS & SON**  
Auburn, N. Y.  
Mention this paper.



**THE RUTHENBURG AUTOMATIC**  
**FIRE EXTINGUISHING & ENGINEERING CO.**  
 CINCINNATI, O. U. S. A.

**CONTRACTORS FOR COMPLETE**  
**EQUIPMENT FACTORIES & MILLS ALL KINDS**  
**AGAINST FIRE**  
 ABUNDANT WATER SUPPLY NO FREEZING.  
 INSTANT ALARM. LOW INSURANCE.

**CHICAGO CAR MOVER**  
 With it One Man can Move a Loaded Car.  
 WEIGHT, including Handle, 15 lbs.  
 Guaranteed not to break or get out of order. Sent on 30 days' trial. Send Postal for Sample, and you will use no other.  
 PRICE, Single Movers, \$6.00. Per pair, \$10.00.  
 Address **J. H. BANNON, Manufacturer,**  
 Room 62, 220 S. Clark St., Chicago, Ill.

Established 1850.

**SINKER, DAVIS & CO.** Capital, \$200,000

MANUFACTURERS AND CONTRACTORS  
 ELEVATOR AND FLOUR MILL MACHINERY.

Five Points of Superiority found in our Engine:

1. Absolutely balanced valve.
2. Closest economy of Fuel.
3. Most reliable and effectual in its work.
4. Simplicity of construction and great durability, requiring less attention by reason of few adjustments.
5. Reasonable Price.

PLANS AND DRAWINGS OF MILLS AND ELEVATORS FREE ON APPLICATION.

**SINKER, DAVIS & CO., Indianapolis, Ind.**

**LENNOX MACHINE CO.,**  
 —MANUFACTURERS OF—  
**ENGINES AND BOILERS,**

—AND DESIGNERS FOR—  
**ELEVATORS, MILLS, ETC.,**  
 Anywhere where a strong, serviceable, well-built outfit is needed. Also, Pulleys, Hangers, Shafting, Boxes, Gearing, and General Elevator and Mill Supplies. Promptness and reasonable prices. Special attention given to repairing Engines, Boilers, and Machinery. Get prices of  
**LENNOX MACHINE CO.,**  
 MARSHALLTOWN, IOWA.

# JOHNSON & FIELD,

MANUFACTURERS OF THE

## Dustless GRAIN Separator

EMBODIES MORE POINTS OF EXCELLENCE

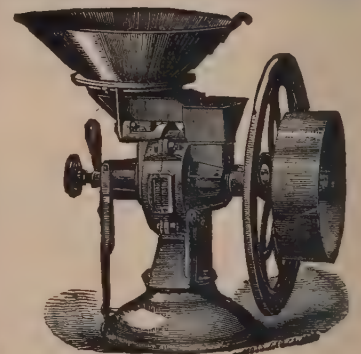
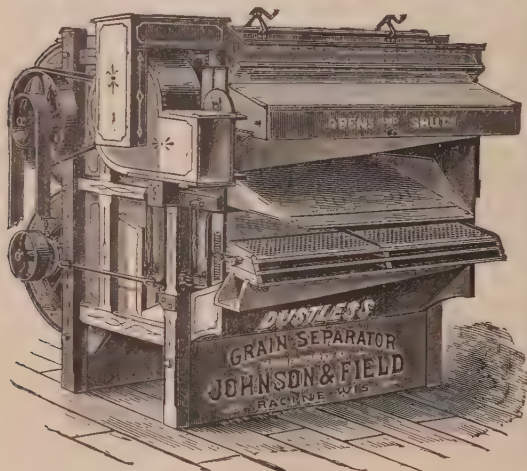
Than any other machine now offered for similar purposes. **Light Running. Large in Capacity. Perfect in Separation, and with great Strength and Durability.**

These machines have no equal. **Adopted and Indorsed** by many of the largest mills and Elevators in the country.

**AS A GRADER IT HAS NO EQUAL.**

Made in Different Sizes to Suit Different Requirements.  
 Send for Circular, with Testimonials and Prices. Address

**JOHNSON & FIELD, - - RACINE, WIS.**



**QUAKER CITY**

**Double Reduction Grinding Mill,**

For Corn and Cob, Feed and Table Meal.

This mill received the First Premium at the Pennsylvania State Fair 1884. Send for Circular.

**A. W. STRAUB & CO.,**

3737 Filbert St., - Philadelphia, Pa.

## Flexible Grain Spout!

**FOR TRIMMING CARS.**

With this Spout you can load a car without shoveling, and it is the best Spout for general use in the market. Will work well in any kind of an elevator, and is designed expressly for loading where there is but little fall from bin.

**H. SANDMEYER & CO.,**

119 & 121 S. Adams St., Peoria, Ill.

—MANUFACTURERS OF—

**Grain Spouts, Elevator Buckets**

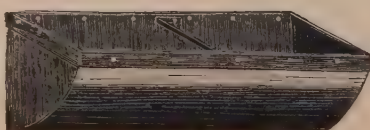
GALVANIZED IRON CORNICES, IRON SKY-LIGHTS,

Tin, Iron and Slate Roofing.

Corrugated

**Iron Siding**

Etc.



## THE TRIMMER GRAIN SCOURER SEPARATOR

Should be in Every Elevator in the Land.

**CLEANS & POLISHES**

**THE GRAIN,**

Removing all impurities without breaking or wasting.

BETHLEHEM, PA.

MESSRS. S. ZIGENFUSS & Co., Trenton, N. J.:  
 GENTLEMEN—Yours of the 4th received. In regard to B. T. Trimmer Grain Scouring, Rubbing, Polishing, Separating and Smut Machine Combined; we have used a great many machines, and are using the "Trimmer," and find it a splendid machine, and know of no better Cleaner in the market. We are so well pleased with the machine that we will have no other; we have been using the machine over two years, and we recommend it as the best Grain Scouring and Polishing Machine we know of.  
 Yours respectfully,  
 D. & A. LUKEBACH.

[Signed]

Made Especially for this Trade by

**THOMPSON & CAMPBELL, 1026, 1028 & 1030 Philadelphia, Pa.**  
 (Successors to KREIDER, CAMPBELL & CO.)

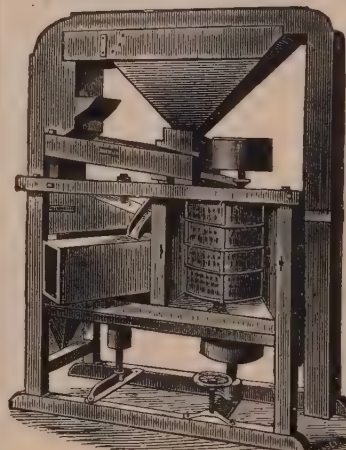
**SEND FOR CIRCULAR.**

**SUBSCRIBE FOR**

**"The American Elevator and Grain Trade,"**

ONLY ONE DOLLAR PER YEAR.

Address **MITCHELL BROS. CO., 184 and 186 Dearborn St., Chicago,**





# ELEVATORS!

THE UNION ELEVATOR  
COMPANY,

—Of this City,—

ADOPT OUR PLANS, WITH THE ESPLIN SYSTEM

—(((OF)))—

## DRIVING

—FOR THE NEW—

# One and One-Half Million Bus. Elevator

**NOW BEING CONSTRUCTED.**

We have never met with stronger Competition than in this case, nor have our Plans ever been  
subjected to a more severe inspection. The fact that such men as comprise this  
Company select our System and Plans in preference to all others, is as  
good proof as the world can produce that we have no equal in  
this business. IT WILL PAY ALL ELEVATOR MEN  
to examine this System before ordering.

**PRAY MFG. COMPANY, MINNEAPOLIS, MINN.**



# CIRCULAR GRAIN ELEVATORS.



**Barnett & Record,**  
315 Hennepin Ave.,  
MINNEAPOLIS, - - MINN.

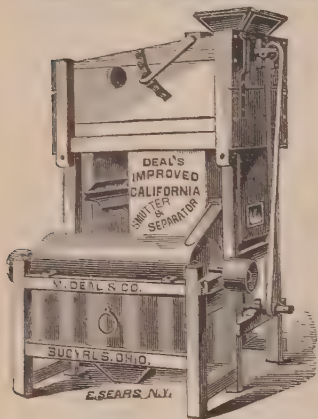
## BUILDERS

For all Territory West of the  
Mississippi.

More than FIFTY in Successful  
Operation in the Northwest.

We Can refer Intending Builders  
to any and all of them.

The Most STORAGE for the  
Least Money,  
AND THE  
Handiest to Operate.



## CALIFORNIA!

DEAL'S CALIFORNIA

## Grain Cleaning Machinery.

We manufacture a complete line of

Cleaners, Scourers, AND Brush Machines

For Mills and Elevators.

WARRANTED THE BEST IN AMERICA;

The purchaser being the judge after 60 or 90 days' trial  
We guarantee every machine to give entire sat-  
isfaction or no pay. Send for cir-  
culars; it will pay you.

**M. DEAL & CO.,**

Sole Owners and Manufacturers,

BUCYRUS, - - OHIO.

# NORDYKE & MARMON CO.,

ESTABLISHED 1851.

INDIANAPOLIS, IND.,

MANUFACTURERS OF

## Elevator Machinery,

Shafting, Shellers,  
Pulleys, Wheat Separators,  
Belting, Engines,  
Scales, Conveyors,  
Wagon Dumps, Elevator Cups.

24 Sizes and Styles of

## PORTABLE CORN MILLS.



Working Plans furnished for all sizes Grain  
Elevators. Send \$20.00 for a set of Drawings for our  
**\$1,000 Elevator.** Capacity 5,000 bushels, House,  
Engine and Machinery all included.

## E. B. FREEMAN,

## ARCHITECT AND PRACTICAL BUILDER

Of Stationary Elevators, Floating Elevators, and  
Special Grain Cleaning Machinery.

PEORIA, ILL.

## WM. E. BENT,

## Architect & Grain Elevator Builder & Contractor

417 OLIVE STREET, ST. LOUIS, MO.

Plans, Specifications and Estimates Furnished on Ap-  
plication. Correspondence Solicited.

Established 1868. **PERFORATED METALS.** Incorporated 1879.

For Use  
in  
Mills,  
Elevators  
and  
Ware-  
Houses.

**THE ROBERT AITCHISON  
PERFORATED METAL COMPANY**  
MANUFACTURERS OF  
PERFORATED SHEET METAL OF ALL KINDS.  
— CHICAGO, ILL. —

For  
All Kinds  
of  
Grain-  
Cleaning  
Machin-  
ery.

Circulars; Samples and Prices on Application.

The Robert Aitchison Perforated Metal Comp'y

74 East Van Buren Street, CHICAGO, ILL.

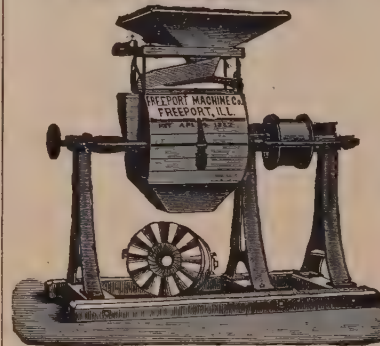
## "EVERY FARMER HIS OWN MILL!"

—THIS CUT ILLUSTRATES OUR—

## Union Flour and Feed MILL!

A combination of Iron Discs and French Burr  
Stone—a grand and late improvement; grinds  
with two-thirds the power of any other Mill of  
same size, and does better work than any all-metal  
grinder. These mills are especially adapted to  
our Geared Windmill, and can be run by any other  
kind of power. We furnish a Bolt at a reasonable  
price when wanted. Write for Circulars.

The Best and most Practical  
as well as the most Durable  
Mill made for General  
Purposes, combining  
New Features never be-  
fore shown in Flour and  
Feed Mills.



We are also Sole Manufacturers for the United States of the  
Stover Pumping and Geared Windmills of all sizes, also Hay  
Loaders, Hay Carriers, Pumps, Pipe and all Water Supplies.

Freeport Machine Co., Freeport, Ill. P. O. Box, 2013.

Write for Circular and Agencies.



## GUARANTEED "CAMARET" ROOFING PLATES

The sale of nearly 30,000 boxes of "CAMARET" brand of Roofing Plates in the  
last 14 months by this house, is sufficient evidence of the appreciation of the quality of this  
standard plate. We guarantee every sheet in a box of "CAMARET" to stand any test of  
bending required—to be well assorted—to be free from wasters—will double flat and open  
without fracture—or boxes to be held subject to our order.

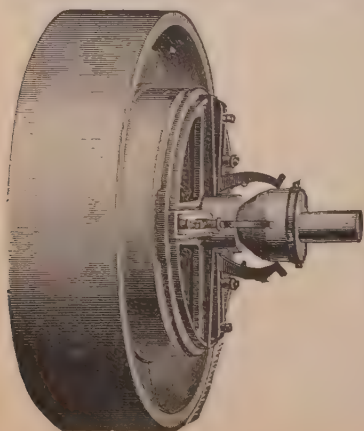
The Palm Oil Coating renders it less liable to rust than any other Roofing Plate  
in the market except extra coated plates. We are the direct importers of the "CAMARET"  
Brand from the Makers and carry a full stock of IC 14x20, IX 14x20, IC 20x28, IX 20x28.

## Merchant & Company

—Importers of—

## BRIGHT TIN AND ROOFING PLATES

90 Beekman St., N. Y. - 525 Arch St., Philadelphia.



## FRICTION CLUTCH PULLEYS!

They are Sure, Strong  
and Noiseless.

You can start a load with this Clutch, at any speed,  
with ease and safety.

Also Split Pulleys, Dead Pulleys  
And Wood Pulleys Whole.

SEND FOR CIRCULAR.

TAPER SLEEVE PULLEY WORKS,  
ERIE, PA.

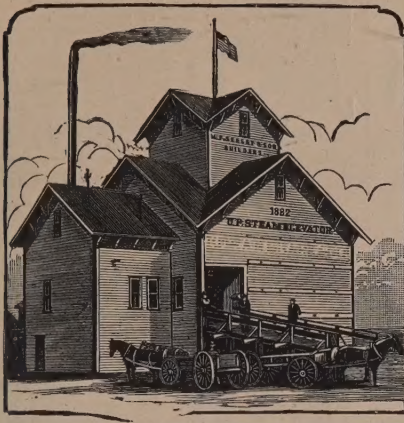


M. F. SEELEY.

J. S. SEELEY.

E. E. HANKS.

C. R. DELAMATYR.



## SEELEY, SON & CO., Fremont, Neb. Elevator Builders.

We build a "SEELEY" ELEVATOR that stands at the head of Elevators as a self-binder stands at the head of reapers. We furnish

Plans, Specifications and Estimates

Also furnish all kinds of

### MACHINERY.

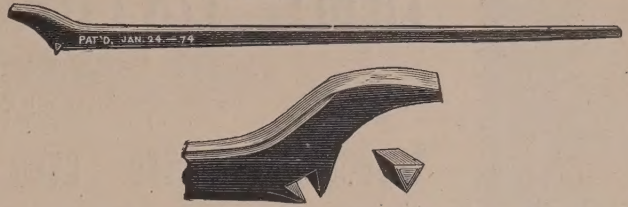
Engines, Cleaners, Corn Shellers, Belts and Buckets, Etc., Etc.

With our experience we can save you on these items more than cost of Plans. Correspond with us and save costly mistakes.

WARRANTED ALL STEEL.

## The Champion Pinch Bar OR CAR MOVER.

PATENTED



JAN. 24, 1874.

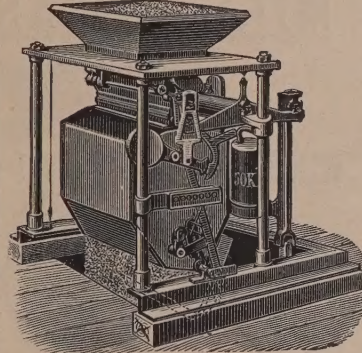
With Adjustable Hardened Steel Grip, made of superior quality of steel, which can be reversed when one edge is worn smooth, and replaced with a new one when all three are worn off.

Price, \$5.00 each, including one extra Grip; price of Grips, 35 cents each, or three for \$1.00. Weight, 15 lbs.; length, 5 feet. We claim for this Bar the following **Advantages**, which will recommend it to all practical users: The entire Bar is made of **Steel**; will work on any style of brake or wheel, and between cars, getting its purchase from the rail to the wheel; it will not slip on ice or grease; one man can easily move any loaded car with it. Address

WEBSTER & COMSTOCK MFG. CO., 125 & 127 Ontario St., Chicago, Ill.

## GOLD AND SILVER MEDALS IN 1883 AT BOSTON, AMSTERDAM AND RIGA.

— Patent Automatic, Adjustable and Controllable —



## Self-Registering Weighing Machine

— FOR —

Wheat, Malt, Grain and Seeds of all Kinds, for Grain Warehouses, Silos, Customs, Flour Mills, Oil Mills, Breweries, Malt Houses, Distilleries, etc.

Great Saving of Labor and Time. Automatic, and therefore the only reliable System of Weighing and Recording.

### COMPETENT AGENTS WANTED.

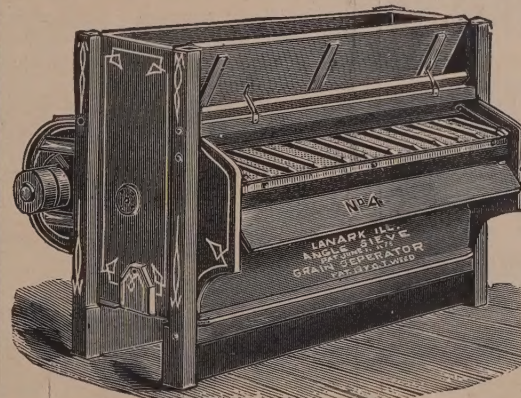
— Full Prospectus from —

C. REUTHER & REISERT, - HENNEF, a. d., SIEG., - GERMANY.

## THE ANGLE SIEVE GRAIN SEPARATOR

(D. T. Weed and H. A. Webber's Celebrated Patent.)

## The CHAMPION of the WORLD.

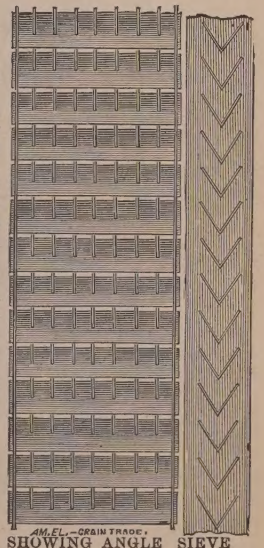


Everybody is astonished to see the work it does. We challenge competition, for general cleaning purposes. We can and WILL separate oats and wheat raised together, the first time through the Separator, and make it fit for market, and not run any wheat over in the oats. No other Separator can help running wheat over, where the suction or blast is depended on to make the separation, which we claim is not the correct principle of separation. The peculiar construction of the sieve, and the motion of it, do the work. We can take oats out of barley just as well, though not quite so fast. No other Separator attempts to do this. We can also clean buckwheat, flax, rice or any other small seeds that any other separator will handle.

WRITE FOR CIRCULARS AND PRICES.

Address the Manufacturer,

D. T. WEED, { ONE OF THE } Lanark, Carroll Co., Ill. { PATENTEES, }



AM. EL. - GRAIN TRADE. SHOWING ANGLE SIEVE

**RUBBER BELTING**

**PACKING**

**AND HOSE**

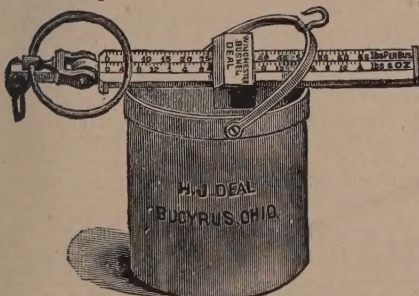
of Superior Quality

Send for samples and prices to

**NEW-YORK-BELTING AND PACKING CO.**

15-PARK-ROW, NEW-YORK

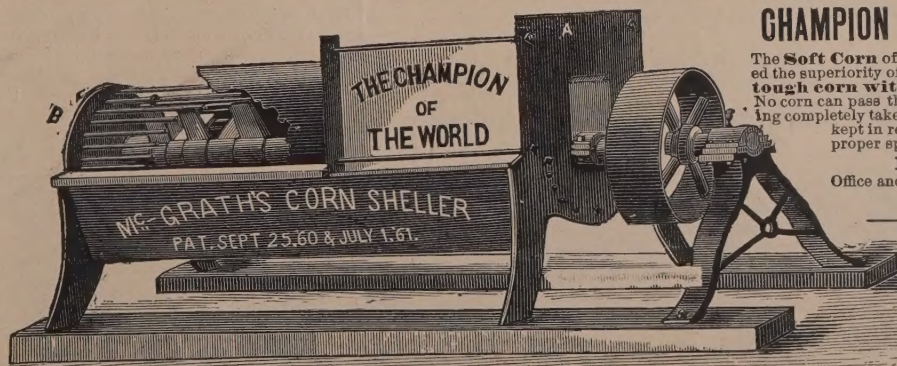
## Improv'd Grain Tester



Invaluable to parties handling Grain or Seeds. Guaranteed perfectly Accurate. Every Elevator Man should have one. Send for new illustrated List "E" and Special Prices for Cash.



**H. J. Deal,**  
Manufacturer of  
**BOARD OF TRADE INSPECTOR.**  
Flour Triers, Magnifying Glasses,  
Grain Testers, Etc.  
BUCYRUS, OHIO.



## CHAMPION OF THE WORLD!

The **Soft Corn** of this year has again demonstrated the superiority of the "Champion" in **shelling tough corn without breaking the grain.** No corn can pass through this Sheller without being completely taken from the cob, if the machine is kept in reasonable repair, and run at the proper speed. Address

**R. M. McGRATH,**  
Office and Works, 136 & 138 S. Third St.  
**Lafayette, Ind.**  
— Also Manufacturer of —

### McGrath's Hornet

AND

McGrath's Twin Corn

Sheller and Cleaner.

McGrath's Pat. Grain

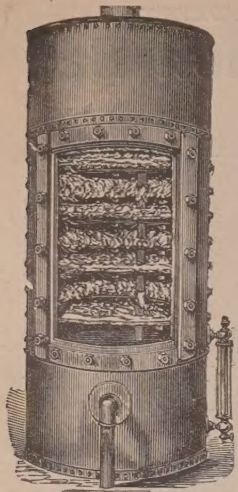
Dump. Also Shaffing,

Pulleys, Hangers and

Warehouse Machinery

of every description.





## STILWELL'S PATENT LIME EXTRACTING HEATER

AND FILTER COMBINED.

Is the only Lime Extracting Heater that will Prevent Scale in Steam Boilers, removing all Impurities from the water before it enters the Boiler.

**THOROUGHLY TESTED. OVER 3,000 OF THEM IN DAILY USE!**

This cut is a facsimile of the appearance of a No. 5 Heater at work on ordinary Lime Water, when the door was removed after the Heater had been running two weeks.

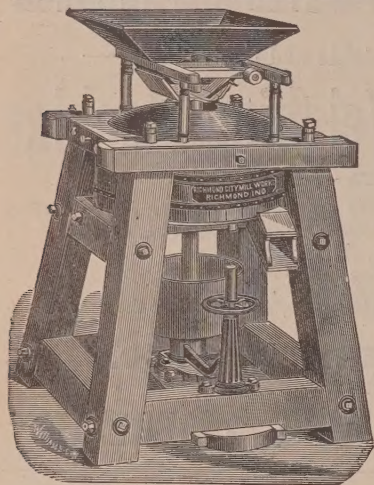
**ILLUSTRATED CATALOGUE FREE!**

**A LARGE NUMBER OF MINES HAVE THEM IN SUCCESSFUL OPERATION**

**STILWELL & BIERCE MFG. CO.,**

DAYTON,

OHIO, U. S. A.



## RICHMOND CITY MILL WORKS

RICHMOND, INDIANA,

Manufacturers of

**IMPROVED MILLING MACHINERY**

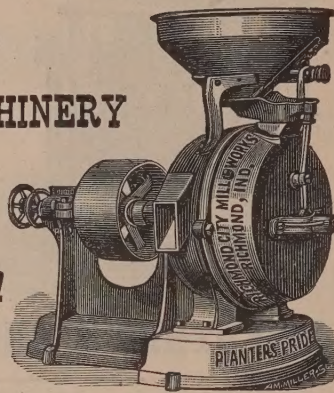
**PORTABLE MILLS**

Of Every Description,

**THE BEST MADE!**

— X —

Write for Description and Prices.



**\$50 REWARD**  
will be paid for any Grain Fan of same size that can clean and bag as much Grain or Seed in one day as our Patent **MONARCH Grain and Seed Separator and Bagger**, which we offer to the public at a low price. Send for circular and price list, which will be mailed FREE.  
**NEWARK MACHINE CO.,**  
Columbus, Ohio, U. S. A.

## DETROIT LUBRICATOR CO'S

PATENT SIGHT FEED

**Lubricator Cups**

For oiling valves and cylinders of steam engines, by the only perfect method, **Through the Steam Pipe.** The oil passes in Sight, drop by drop, into the column of steam, where it ATOMIZES, thus becoming a STEAM LUBRICANT, oiling perfectly every part reached by the steam. Saves from 50 to 90 percent. in oil and wear of machinery, thus paying for itself several times a year. A cup will be sent to responsible parties on 20 days' trial if desired.

We refer to more than 10,000 firms using them.

Address **DETROIT LUBRICATOR CO.,**  
Office, 129 Griswold St., DETROIT, MICH.



## AMERICAN Automatic Scale Register

—For Use in—

**Flour Mills**

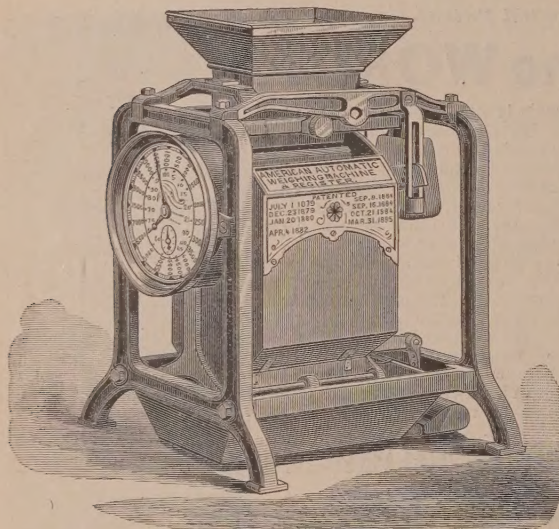
**ELEVATORS,**

Etc.

EVERY SCALE

**WARRANTED.**

Send for  
Circular.



**ZINN & KAYSER, 63 PRINCE STREET, New York.**

## SEEDS

**ALBERT DICKINSON,**  
Dealer in Timothy, Clover, Flax, Hungarian, Millet, Red Top, Blue Grass, Lawn Grass, Orchard Grass, Bird Seeds, &c.  
**POP CORN.**  
Warehouses 115, 117 & 119 Kinzie St. OFFICE, 115 KINZIE ST., CHICAGO, ILL.

**W. J. CLARK  
& CO.,**  
Sole Manuf'rs,



**SALEM, - OHIO.**

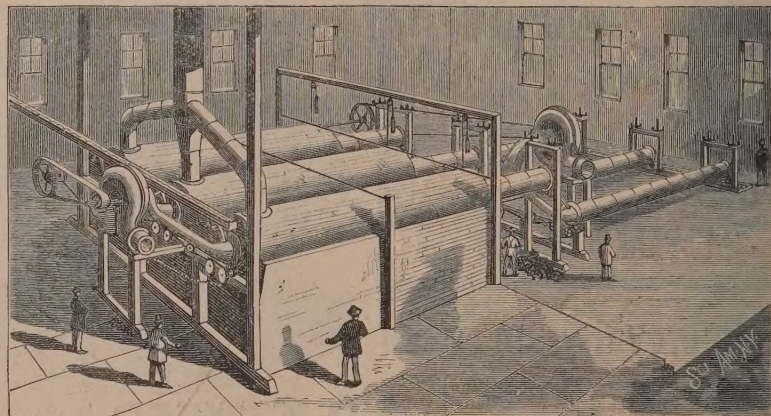


**Thornburgh & Glessner**  
Gen'l Agents.



**CHICAGO, ILL.**

## WORRELL'S —IMPROVED— GRAIN DRIER AND COOLER!



Capacity, 5,000 bushels per day.

**The only Practical Machine in the market**

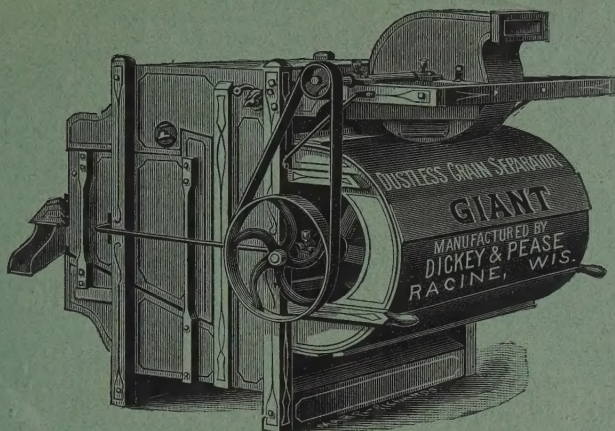
Been in successful operation for three years. Expense of operating UNDER ONE CENT per bushel. Will remove the must from damp and low grade DRY grain. Perfectly adapted for elevators for cooling "HOT" grain.

Send for Illustrated Descriptive Pamphlet. Machines made only by the patentee; with capacity from 40 bushels per hour to ten car loads per day. Address,

**S. E. WORRELL, HANNIBAL, MO.**



# 'Giant' Dustless GRAIN Separator



We claim for the "Giant" **Superiority over all other Separators** for the following strong reasons:  
 1st.—It is simple in its construction, **Strong and Durable**. Any one competent to run a **fanning mill** can operate the "Giant."  
 2d.—The height from the floor to the top of the receiving hopper is but 4 feet 3 inches, hence it will accommodate spouts from different points the same as a fanning mill, that is **without being obliged to move the machine**.  
 3d.—The cost is not much over one-half that of

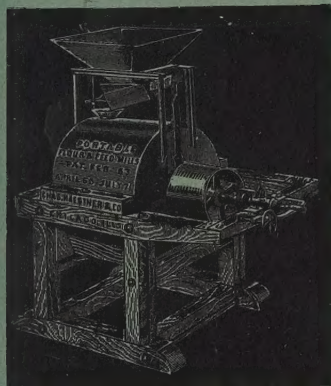
any other Separator that will do the same work.

4th.—This machine will clean and screen better and faster than any other Separator made sizes being equal. **Every Separator GUARANTEED to give Satisfaction.**

**SENT ON APPROVAL TO ANY RELIABLE PARTY.**

For Descriptive Circulars and Prices address

**DICKEY & PEASE, - - SOLE MANUFACTURERS, RACINE, WIS.**



**The King of Portable Grinding Mills.**

**THE KAESTNER PATENT.**

Built in Four Sizes, 16, 20, 24 and 30 Inches.  
 SUITABLE FOR ANY POWER, 2 TO 15 HORSE.

**Each Mill Guaranteed to Give Entire Satisfaction, or Money Refunded.**

**OVER 6,000 IN USE.**

Live references in every state and territory. Will grind Wheat, Corn, Rye, Oats, etc. Write for Catalogues, etc

**CHAS. KAESTNER & CO.,**

**Machinists, Founders and Mill Finishers, Grain Elevator Machinery a Specialty.**

**303-311 S. Canal St., - - Chicago, Ill.**

## H. CHANNON & CO.,



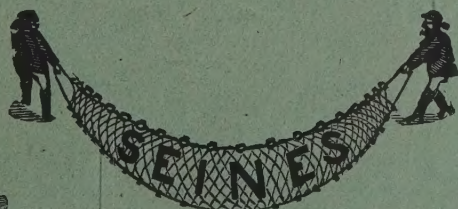
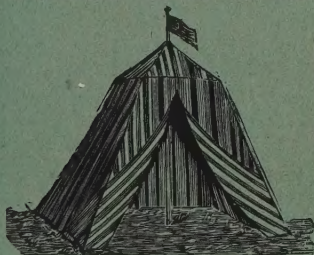
**WIRE ROPE**

Of the Finest English CRUCIBLE STEEL, and Best Selected CHARCOAL IRON.

**FOR EVERY PURPOSE.**

**WIRE ROPE TRANSMISSION! RUBBER PACKED WHEELS!**

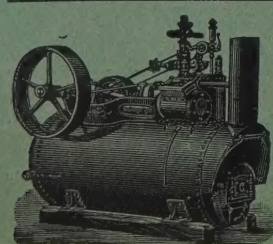
**HORSE AND WAGON RAIN-PROOF COVERS,**



**Stack and Binder Covers, Oiled Clothing, Etc.**

**210 to 216 S. Water St., Chicago, Ill.**

**CIRCULARS and any INFORMATION Sent on Application.**



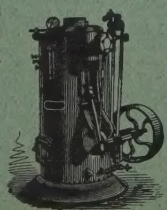
**BOOKWALTER ENGINES.**

**UPRIGHT ENGINES:** 3 Horse, 4½ Horse, 6½ Horse and 8½ Horse Power. Safe, Simple and Durable. Over 3,000 in successful operation.

**New Style 10 H.P. Horizontal Engine.** Center Crank Engine. All wrought iron Return Flue Boiler. Compact, Substantial and handsomely finished. Illustrated Pamphlet sent free. Address

**JAMES LEFFEL & CO., SPRINGFIELD, OHIO.**

Eastern Office: 110 Liberty St., New York.



## HILL GRAIN-SCALE COMP'Y,

**DETROIT, MICHIGAN,**

—MANUFACTURERS OF—

**Automatic Grain Scales,**

**ACCURATELY WEIGHING AND REGISTERING**

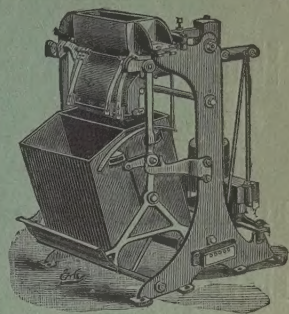
**ANY SPOUTED MATERIAL IN**

**Flour Mills, Elevators, Breweries, Distilleries, Malt Houses, Oil Mills, Rice Mills, Starch Factories, etc.**

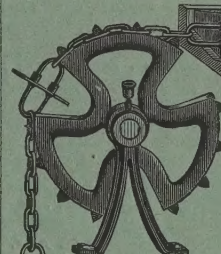
**BRANCH OFFICES:**

**In New York, Boston, Chicago, Cincinnati, St. Louis, In Baltimore, Denver, Atlanta, San Francisco, Montreal.**

Send for Illustrated and Descriptive Catalogue.



## CLEAN WORK!



**HARRISON CONVEYOR.**

**ALL WROUGHT IRON.**

**No Mixing of Grain.**

**IT CARRIES** Grain, Seeds, Ear Corn, Wet or Dry Malt, Coal, Sand, Saw Dust, Tan Bark, Stone, Cinders, Clay, Bricks, Boxes, Blocks, Packages, Paper Pulp, Cotton Seed, Etc., Etc.

**SEND FOR CIRCULAR AND PRICE LIST.**

**BORDEN, SELLECK & CO., Gen. Agts., 92 & 94 Lake St., CHICAGO, ILL.**

## KNISELY & MILLER,

**129 & 131 South Clinton St, CHICAGO,**

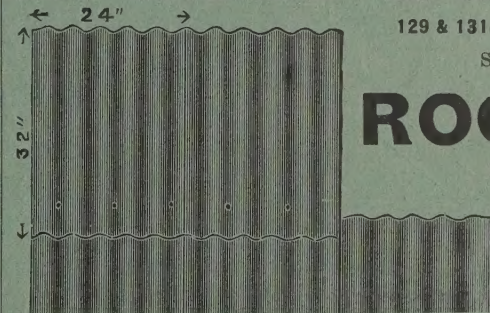
**Slate, Tin and Iron**

**ROOFERS!**

**Manufacturers of**

**CORRUGATED IRON**

**For Roofing And Siding.**



This cut shows our method of fastening Corrugated iron to Elevator Bins to allow for settling and raising.

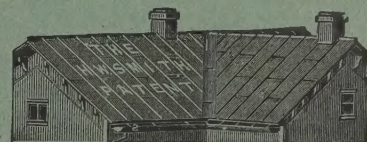
**T. C. SNYDER & CO.**

—MANUFACTURERS OF—

**IRON ROOFING, SIDING AND CEILING,**

(The H. W. Smith Patent is the best in use.)

**PLAIN, Corrugated, CRIMPED, BEADED,**



**And Jobbers in IRON ORE PAINT, CEMENT,**

**And Roofers' and Builders' Papers.**

**Patent Calamined Iron in Quantities---A New Thing.**

Coating is indestructible, will not scale, is soft, solders more strongly, and is superior to Galvanized Iron or Tin for all purposes. Protected both in body and surface. Circulars, Price Lists, and Samples mailed at request.

**CANTON, - - - OHIO.**

## ELASTIC CEMENT!



**Invaluable for Repairing and Pointing Up all kinds of Water Leaks around Chimneys, Copings, Skylights, Gutters, Cupolas, Dormer Windows, Slate, Stone, Brick, Wood, Iron, etc. Slate Roofs, Hips or Joists, Copings, Iron, Stone or other work bedded in this Cement will never leak or become loosened.**

**FLEXIBLE PAINT,**

Composed of Paint Skins boiled in Linseed Oil and ground fine with iron metallic. The toughest, most durable, prettiest and cheapest Paint ever manufactured for all outside work exposed to weather. Dries quickly, with solid skin like India Rubber.

**Ready for Use.**

**SEND FOR CIRCULARS AND PRICE LIST.**

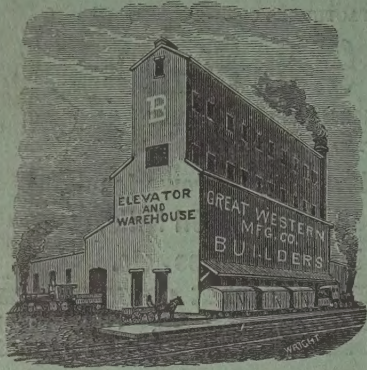
**VANDERVOORT & TUCKER, - 116th Street, East River, NEW YORK CITY.**

In writing please mention this paper.



# GREAT WESTERN MFG. CO., LEAVENWORTH, KANSAS.

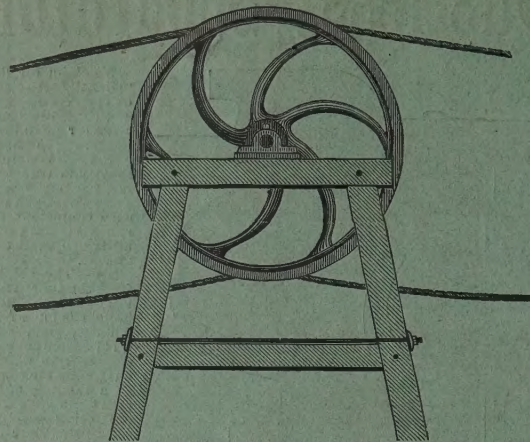
Steam Engines,  
PULLEYS,  
SHAFTING,  
GEARING,  
FLOUR MILL  
—AND—  
ELEVATOR  
MACHINERY  
—OF—  
Every Description.



CORN  
SHELLERS,  
SEPARATORS,  
SCALES,  
BELTING,  
Elevator  
Cups,  
BOLTING CLOTH,  
STEAM PUMPS,  
PIPE AND FITTINGS.

We Carry the Largest Stock of Mill and Elevator Supplies to be found West of the Mississippi River.

# WIRE ROPE TRANSMISSIONS!



Portable Mills,  
Pulleys,  
Shafting, Etc.

SEND FOR  
Illustrated Treatise  
—ON—

WIRE ROPE  
Transmissions,  
AND OUR  
General Price  
AND  
Pattern Lists.

WILLIAMS & ORTON MFG. CO., { 400 Locust Street. } STERLING, ILL.

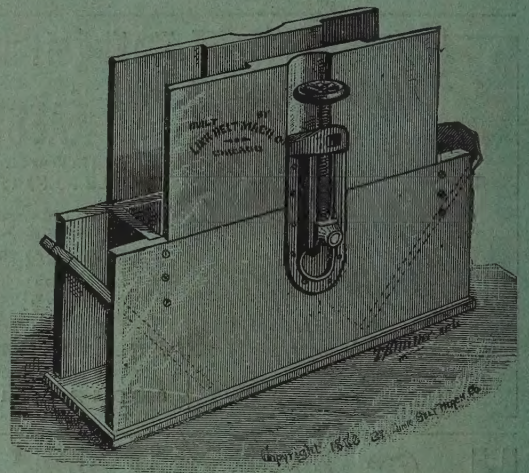
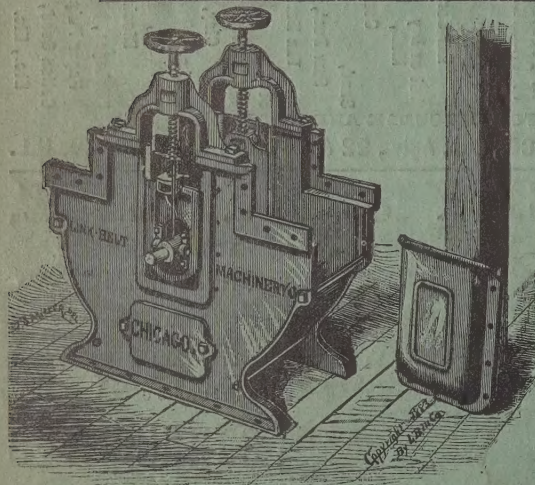
# THE LINK-BELT MACHINERY CO.

CHICAGO.

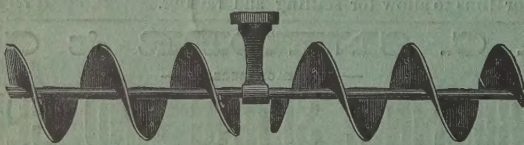
ALL SIZES OF

ELEVATOR BOOTS  
IN IRON AND WOOD,  
FOR  
LINK BELTING  
—OR—  
FLAT BELTING,

CARRIED IN STOCK.



# SPIRAL CONVEYORS!



Patented April 17th, 1888.

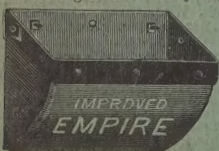
The Webster & Comstock Patent Backbone Steel Conveyor is the BEST for the following reasons: ALL WEARING PARTS are STEEL; only the best material is used, and only skilled and experienced workmen are employed in its construction. Steel, as is well known, possesses much greater wearing qualities than iron. It is also a stiffer material, rendering the flights less liable to bend back or when subjected to a heavy strain. The steel also takes a high polish, making less friction in running through the grain. Our flights are all stamped out with dies, thus insuring a true and smooth running conveyor.



PAT. FEB. 6, '83.

**COUPLING.**—Our Coupling has points of advantage over any Coupling in the market. The collar into which the Coupling fits is made of steel, and has, on its inner side, a feather, "A," which fits into the slot "B," in coupling, thus relieving the shaft of all twisting strain.

By a recent improvement it admits of disconnecting and taking out one length of conveyor without moving back or in any way disturbing the whole line.



On all Driving Ends and every alternate coupling we furnish our improved Patent Steel Collar and Lug, made in one piece. As the greatest strain is always on the driving end, this improvement will be appreciated by all users of Spiral Conveyors.

## OTHER SPECIALTIES.

"Common Sense" and "Empire" Buckets, Elevator Bolts, Steel Grain Scoops, Mosher Patent Bag Holder, Elevator Turn Heads, Elevator Boots, "Power" Grain Shovel, Lenox Car Loader, Belt Buckles, Car Starters, etc.

—Send for Catalogue. Address—

WEBSTER & COMSTOCK MFG CO.,  
125 and 127 Ontario St., CHICAGO.

# PERFORATED SHEET METALS



For all Kinds of

# GRAIN-CLEANING MACHINERY,

Elevators, Warehouses, Flour and Rice Mills, Cotton and Linseed Oil Mills, Etc., Etc.; Iron and Zinc for Rolling Screens, Corn Screens, Grain Dryers, Perforated Floors, for Kilns, used in Drying Oats, Corn, Fruit, etc. Smut Mill Jackets of all kinds and sizes made to order. We will renew your Sieves for Oat Separators, Receiving Riddles, Corn Screens, etc., at short notice.

Samples and Prices on Application.

THE HARRINGTON & KING PERFORATING CO.,  
100 Beekman St., New York. Nos. 224 and 226 North Union St., CHICAGO.

# CROWL'S PATENT IRON ROOFING

Took FIRST Medal at the New Orleans Exposition.

## Corrugated Iron Siding,

The only Double Capped Corrugated Roofing, and the only one prepared by the manufacturers ready for laying.

## CORRUGATED EDGE ROOFING.

AGENTS WANTED EVERYWHERE.

CAMBRIDGE ROOFING CO., - CAMBRIDGE, OHIO.

Send for Illustrated Catalogue and Price List.

SUMMERS & JENNINGS, - OMAHA, NEBRASKA. - GENERAL WESTERN AGENTS.